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NORTHWESTERN UNIVERSITY BULLETIN

DENTAL SCHOOL
ANNOUNCEMENTS
1915-1916

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Northwestern University

EVANSTON and CHICAGO

DENTAL SCHOOL ANNOUNCEMENTS 1915-1916



Published by the University
July, 1915

Dental School Calendar

1915-1916

1915

- Sept. 27 Mon. Examinations for advanced standing begin
Oct. 5 Tue. Academic year begins
Oct. 15 Fri. Last day for entrance in course
Nov. 25 Thu. Thanksgiving Day
Dec. 22 Wed. Last day of school before Christmas recess

1916

- Jan. 5 Wed. First day of school after Christmas recess
Feb. 7 Mon. Mid-year examinations begin
Feb. 12 Sat. Lincoln's Birthday
Feb. 16 Wed. Second semester begins
Feb. 22 Tue. Washington's Birthday
May 25 Thu. Senior examinations begin
May 30 Tue. Memorial Day
June 1 Thu. Junior and Freshman examinations begin
June 7 Wed. Practitioner's Course begins
June 12 Mon. Alumni and Commencement Banquet
June 13 Tue. Home Coming Clinic
June 14 Wed. FIFTY-EIGHTH ANNUAL COMMENCEMENT
July 6 Thu. Practitioner's Course ends

The University

ON the last day of May, in the year 1850, there met in the City of Chicago, at the office of Grant Goodrich, 109 Lake Street, near Dearborn, nine men, Richard A. Blanchard, Jabez K. Botsford, Andrew J. Brown, Henry W. Clark, John Evans, Grant Goodrich, Zadoc Hall, Richard Haney, and Orrington Lunt, to consider the founding of a university in the vicinity of Chicago. They agreed that "the interests of Christian learning demand the immediate establishment of a University in the North-west," and appointed a committee to petition the General Assembly for a charter. January 28, in the next year, 1851, Governor French signed the Act that incorporated "the Trustees of the Northwestern University." The name of the corporation has since been changed to Northwestern University.

The first Board of Trustees consisted of thirty-six persons, some of whom were representatives of annual conferences of the Methodist Episcopal Church and some residents of Chicago or vicinity. The corporation as at present constituted consists of thirty-six trustees elected by the Board, and two elected by each of three annual conferences of the Methodist Episcopal Church, making a total of forty-two.

The charter provides that a majority of the Board shall be members of the Methodist Episcopal Church, but that no particular religious faith shall be required of those who become students at the institution.

Amendments have provided that other chartered institutions may become departments of the University; that all property of whatever kind or description belonging to or owned by the said corporation shall be forever free from taxation for any and all purposes; that no spirituous, vinous, or fermented liquors shall be sold under license or otherwise, within four miles of the location of the University.

After considering several locations in the vicinity of Chicago, the Trustees selected for the University a tract of land on the shore of Lake Michigan, twelve miles north of the heart of Chicago. Here in 1855 the first University building was erected, and about this location has grown up the City of Evanston, a beautiful residential city of thirty thousand inhabitants. The professional schools of Medicine, Law, Pharmacy, Dentistry, and Commerce are situated in the city of Chicago.

Dental School

THE DENTAL SCHOOL was founded and is maintained for the purpose of preparing young men and young women in the most thorough manner for the practice of dentistry, and for the promotion of dental science and dental literature.

The Dental School was organized in 1887 and three years later became a department of the University. In 1896 it absorbed the American College of Dental Surgery and for some years occupied the building on Franklin and Madison Streets, Chicago, formerly occupied by that school. It is now located in Northwestern University Building, at the corner of Lake and Dearborn Streets, Chicago, occupying the upper three floors of the building, over 60,000 square feet.

The clinic room, sufficient in extent to accommodate the great clinic and the offices connected with it, is of the best design of construction, consisting of a single room with arched ceiling. It is on the sixth floor, with free light on two sides and abundant skylight. Adjoining the operative clinic is the prosthetic clinic, and on the same floor is the senior Prosthetic laboratory for crown and bridge work, the laboratory for porcelain and cast metal inlay work, an impression room, and two rooms and waiting room for extracting, and a room devoted to radiographic work. The lecture rooms, three in number, are arranged on the amphitheater plan; each accommodates 225 students. Two are for the ordinary class lecture work, and one for the oral surgery clinic which has a waiting-room for surgical patients, a room for diagnosis and the preparation of patients, and a recovery room with sufficient beds for the temporary care of patients. Other rooms are the anatomical laboratory, which is placed well apart, the first year and the second year prosthetic laboratories, the operative technic laboratory, the first year and the second year chemical laboratories, the laboratory for histology and bacteriology, the photographic laboratory, the museum, the reading room, and library.

Northwestern University Building is in the transportation center of over three millions of people living within a radius of forty miles, a location especially advantageous for obtaining the great number of clinical patients needed in a dental school.

SITUATION AND SURROUNDINGS

The central location of the school and its convenient access from every point affords many and peculiar advantages to its students. It gives them the widest possible range of choice of residence while attending the school, without inconvenience in coming and going. It also gives the school the widest range of territory from which to draw the extensive clinic so necessary to a great dental school. The patients for this clinic come from all parts of the city of Chicago and its suburbs. The personal influence of the students of the school, each one of whom draws from his own friends and acquaintances, made in and about his place of residence, is an invaluable adjunct to the number who come simply as acquaintances of the school. Patients who come as the friends of students make up the personal clinical practice of the individual student.

In this the out-of-town students seem to be in no respect less favored than the student whose home is in the city. This gaining, and holding, a personal clinical practice under the supervision of the instructors in the clinic rooms has come to be one of the features of this school that has a telling effect upon the after-practice of its students. By this plan of work the student not only learns the theory of practice and the manipulations of practical operations in dentistry, but he passes at once to the work of real experience in building a practice for himself; in gaining that skill in professional comity and personal manner between himself and his patients, which is as necessary to him in after years, in drawing together and maintaining a practice, as his knowledge of dental diseases and his skill in their treatment.

For these reasons the residence of students in groups in widely different portions of the city is favored. This also gives the benefits of a more homelike life, while giving in the aggregate a far better conception of life in a great city and decidedly better opportunity to draw upon its advantages, while shunning the disadvantages of large gatherings of students in a single locality.

Chicago is a great city and gives many opportunities to the student who learns to avail himself of them. Lincoln Park on the north offers, besides its beautiful pleasure grounds, some extensive botanical gardens and winter conservatories, where all manner of plants may be enjoyed and studied; a fine zoological collection, where a large variety of animal and bird life may be studied, and the Museum of Natural History, in which there is a very large collection of birds, animals and fossil remains of extinct animal life.

Jackson and Washington Parks on the south, besides their extensive pleasure grounds, also offer splendid botanical gardens and winter conservatories, while the Field Columbian Museum offers a rare collection of Natural History specimens especially suited for the study of comparative dental anatomy, of modern and ancient skulls and the condition of the teeth in the various races and types of men in different ages. The admission to this museum is free to students on presentation of their matriculation tickets to this school.

OTHER LIBRARIES

A number of libraries are accessible to students who have taste for study, or for looking up subjects of scientific or literary interest, or in connection with special studies.

The University library collections offer very abundant facilities for students. They are ample in the number of books adapted to the different schools and are so situated as to be easily accessible; generally within the school buildings. They consist of:

The College collection.

The Law collection.

The Medical collection.

The Pharmacy collection.

The Theodore Menges Library of the Dental School, and

The Theological collection.

CHICAGO LIBRARY (630,227 volumes, July, 1915) is on Michigan Avenue and Washington Street, five minutes' walk from the school. It is one of the finest libraries in the country. Students may receive books from this library when vouched for by responsible persons known to the officials. This library has also many branch offices in different parts of the city, from which books may be received on application. These are convenient to many of the boarding places of students.

THE NEWBERRY LIBRARY is very large (355,127 volumes, July, 1915), and, besides general works, has also a large medical and dental library. It is on North Clark Street and Walton Place, and may be reached in a ten minutes' walk. This is a reference library, and books can be used only in its reading rooms.

THE JOHN CRERAR LIBRARY (344,510 volumes, July, 1915) occupies one and one-half floors in the Marshall Field Building, corner Wabash Avenue and Washington Street. It is devoted mainly to the natural, the physical and the social sciences, with their applications. It is a most excellent collection of books. It is a reference library, and its books are used only in its reading rooms.

The Faculty

Abram Winegardner Harris, Sc.D., LL.D.
President

Greene Vardiman Black, M.D., D.D.S., Sc.D., LL.D.
Dean

Charles Rudolph Edward Koch, D.D.S.
Secretary

Greene Vardiman Black, M.D., D.D.S., Sc.D., LL.D.
Professor of Special Pathology, Operative Dentistry, Bacteriology, Materia
Medica, and Therapeutics

Thomas Lewis Gilmer, M.D., Sc.D., D.D.S.
Professor of Oral Surgery

Edmund Noyes, D.D.S.
Professor of Dental Jurisprudence and Ethics

James Harrison Prothero, D.D.S.
Professor of Prosthetic Technics, Prosthetic Dentistry, and Metallography

Twing Brooks Wiggin, M.D.
Professor of Physiology; Instructor in Physical Diagnosis

Charles Rudolph Edward Koch, D.D.S.
Lecturer on Dental Economics

Ira Benson Sellery, D.D.S.
Professor of Orthodontia

Harry Mann Gordin, Ph.D.
Professor of Chemistry

Arthur Davenport Black, M.A., M.D., D.D.S.
Professor of Operative Dentistry; Assistant in Oral Surgery

Eugene Shaw Willard, D.D.S.
Professor of Bacteriology; Assistant in Operative Dentistry

Fred William Gethro, D.D.S.
Professor of Dental Anatomy and Operative Technics; Assistant in
Operative Dentistry

Harry Isaac Van Tuyl, B.S., M.D., D.D.S.

Professor of Anatomy

George Corwin Poundstone, D.D.S.

Professor of Materia Medica and Therapeutics

Herbert Anthony Potts, D.D.S., M.D.

Professor of Pathology; Lecturer on Anæsthesia; Assistant in Oral Surgery

William Bebb, M.S., D.D.S.

Professor of Comparative Anatomy; Curator of the Museum

Newton George Thomas, B.A., M.A., D.D.S.

Acting Professor in Histology

Merton Meyne Postle, D.D.S.

Assistant Professor of Prosthetic Dentistry

James Leonard Morlan, B.S., D.D.S.

Assistant Professor of Operative Dentistry

George Buchanan Macfarlane, D.D.S.

Chief Clinical Instructor in Operative Dentistry

Percy Benjamin DeWitt Idler, D.D.S.

Clinical Instructor in Operative Dentistry

Lucian Willis Strong, D.D.S.

Clinical Instructor in Prosthetic Dentistry

Hillis Talley Brown, D.D.S.

Senior Instructor in Anatomy

Alvin Thompson, M.D.

Instructor in Pathology

Frank Willis Gale, D.D.S.

Instructor in Histology

William Graham Skillen, D.D.S.

Instructor in Histology

Robert Edwin Blackwell, D.D.S.

Instructor in Operative Technics; Demonstrator in Clinical Operative Dentistry

Luther P. Basford, D.D.S.

Examiner of Patients

George Herbert Sutphen, Ph.C.
Assistant in Chemistry

George Edward Meyer, D.D.S.
Assistant in Oral Surgery

Floyd De Witte Leach, D.D.S.
Radiographer and Lecturer in Radiography

Roscoe Leaton Stout, D.D.S.
Instructor in Prosthetic Technics, in Charge of Prosthetic Laboratories

Joseph Emerson Ridgway, D.D.S.
Assistant in Prosthetic Technics

Michael Joseph Buckley, D.D.S.
Special Demonstrator in Orthodontia

Charles West Freeman, D.D.S.
Assistant in Oral Surgery in Charge of Extractions

Johannes Wilhelm Otto Weickardt, D.D.S.
Demonstrator in Operative Dentistry

Ernest Kennedy, D.D.S.
Demonstrator in Prosthetic Dentistry

John Joseph Collins, D.D.S.
Demonstrator in Prosthetic Dentistry

August Henry Koch, D.D.S.
Demonstrator in Prosthetic Technics

Roland Alfred Herzog, D.D.S.
Demonstrator in Operative Dentistry

Harry Fortin, B.A.
Assistant in Pathology

Walter Nelson Rowley
Assistant in Physiology, in Charge of Physiological Laboratory

Alfred James Drew, D.D.S.
Demonstrator in Operative Technics

William Gerald Hopper, D.D.S.
Demonstrator in Operative Dentistry

John Connel Gallagher, D.D.S.
Demonstrator in Operative Dentistry

Admission and Instruction

ADMISSION

A candidate for admission to the Dental School for the year 1915-1916 will be accepted—(1) upon presentation of a diploma, or equivalent certificate, from an accredited high school or secondary educational institution which requires four years for the completion of its course, and not less than 15 High School units before graduation; or (2) upon passing a satisfactory examination before a duly authorized State Examiner or Board of Examiners, under the direction and supervision of a Superintendent of Public Instruction, or like officer, of a state, and presenting from such authority a certificate showing that the holder is entitled to not less than 15 High School units of credit made up from the subjects included in the subjoined list; or (3) upon presenting evidence that he has been admitted to the Liberal Arts department of an accredited university or college without conditions.

A unit is a course of study requiring daily recitations on one topic for a full school year. No student will be admitted who carries any conditions in this entrance requirement.

This School will receive no student who is not present within ten days after the opening day of the session in each year, or in case of necessary delays, by reason of illness properly certified by the attending physician, within twenty days after the opening day. Undergraduate students are not received for special courses in dentistry.

Students registering agree thereby to accept the discipline imposed by the Faculty.

It is desirable that students should register early, since the order of assignment of seats in the lecture halls is based upon the order of registration.

SUBJECTS WHICH MAY BE PRESENTED FOR ADMISSION

English, 1st, 2nd, 3rd, 4th years	Physics
Latin, 1st, 2nd years	Chemistry
Greek, 1st, 2nd years	Botany
German, 1st, 2nd years	Zoölogy
French, 1st, 2nd years	Biology
Spanish, 1st, 2nd years	Physiology
Algebra, 1st year, Higher	Physiography
Geometry, Plane, Solid	History, Ancient, Medieval, Modern, English, American (Advanced)
Trigonometry	
Advanced Arithmetic	

Civil Government
 Political Economy
 Commercial Geography
 Commercial Law
 Drawing

Bookkeeping
 Stenography
 Agriculture
 Subjects not specified

Beginning with the year 1916-1917 students will be required to have not less than 3 units in *English, 1 unit in Algebra and 1 unit in Plane Geometry. Other units may be selected from the subjects enumerated below. Under the head of *Subjects not Specified*, Domestic Science, Drawing, Bookkeeping, Stenography, Agriculture and Advanced Arithmetic may be presented. No credit amounting to less than $\frac{1}{2}$ unit will be allowed toward the 15 units standard.

SUBJECTS

English	3 units	Mediæval and Modern History	1 unit
Latin	2, 3 or 4 units	English History	1 unit
Greek	2 or 3 units	American History (or with Civil Government)	1 unit
German	2 or 3 units	Civil Government	$\frac{1}{2}$ unit
French	2 or 3 units	Political Economy	$\frac{1}{2}$ unit
Spanish	2 units	Commercial Geography	$\frac{1}{2}$ unit
Algebra	1 unit	Commercial Law	$\frac{1}{2}$ unit
College Algebra	$\frac{1}{2}$ unit	Physiology	$\frac{1}{2}$ unit
Plane Trigonometry	$\frac{1}{2}$ unit	Mechanical Drawing	1 or 2 units
Plane Geometry	1 unit	Manual Training	1 or 2 units
Solid Geometry	$\frac{1}{2}$ unit	Subjects not specified	
Physiography	1 unit		
Physics	1 unit		
Botany	1 unit		
Zoölogy	1 unit		
Chemistry	1 unit		
Biology	1 unit		
Ancient History	1 unit		

ADMISSION TO ADVANCED STANDING

Students wishing credit for courses parallel to courses required in this School, should bring credentials showing the time spent on these subjects and should present their note books written in these courses. No credit will be allowed for high school chemistry.

*Foreigners from non-English speaking countries, who present more than four units of foreign language, and who can speak, read and write the English language, will be accepted as meeting the requirement in English.

Students who present certificates from other recognized dental schools covering subjects required in this School, may be credited with such studies if their preliminary education was such as would have admitted them to this School as Freshmen, and if the credentials are satisfactory to the Dean and to the professors in the respective departments; but credits are not accepted unconditionally. The Faculty reserves the right to examine any applicant for advanced standing, if in its judgment that should be desirable. When admitted to the third year the candidate must do one full year's work in this School.

Graduates from recognized schools in medicine are credited with one year of time.

Examinations for advanced standing and for the removal of conditions in the Dental course will begin on September 27th, 1915—one week before the course begins—and no make-up examinations will be given at a later time.

Course for the Degree of Doctor of Dental Surgery

The course covers three years. The year begins on the first Tuesday in October and closes on Commencement Day of the University in June. There are not less than thirty-two weeks of actual instruction given, six days in each week.

It has been decided to extend the course to four years beginning with 1917-1918.

Students for the regular course are received only during the first ten days of the first semester. Graduate students desiring to pursue special studies may be received at any time.

For regular students who desire to extend their studies to four or more years, a special arrangement of studies will be provided.

A post graduate, or practitioner's course has been specially arranged which begins the day after Commencement in each year, and continues during four weeks thereafter.

METHODS OF INSTRUCTION

The studies of the course are grouped by departments, the work of each department proceeding from the general and fundamental subjects to the specialized and advanced.

The work in the departments is planned with reference to that of other departments, and the greatest care is taken that the whole shall be so correlated that the student in taking up a new subject will find himself prepared by work done in other departments.

Curriculum

THREE YEARS COURSE

This course leads to the degree of Doctor of Dental Surgery. The school year begins the first Tuesday in October and closes the second Wednesday in June. This course will not be offered after the year 1916-1917.

FOUR YEARS COURSE

This course also leads to the degree of Doctor of Dental Surgery and covers a period of four years of collegiate study, each year covering the same period of time as that named in the three-year course. It is optional during the years 1915-1916 and 1916-1917, but will be required beginning with the year 1917-1918.

Combined Courses

Students who desire to obtain the Bachelor of Science and Doctor of Dental Surgery degrees may enroll on a combined Literary and Dental course, and thus shorten the required time for earning the two degrees from seven to six years. This privilege is open to students who during their first three years have maintained a uniform record of good scholarship. A candidate for the degree of Bachelor of Science who has been a student in the College of Liberal Arts for at least one year may enroll upon the combined course.

Schedule of Courses

Beginning with the session of 1915-1916 the general plan of teaching will be changed by the division of classes into small sections for recitation and laboratory periods, in order that the student may receive more thorough instruction and be brought into closer relations with the professors and other instructors. To accomplish this, the building has been remodeled to provide necessary additional rooms and laboratory facilities. The teaching staff will be increased in every department.

Students are expected to take the courses in the order enumerated, but some deviation from this rule may be allowed in cases approved by the Faculty.

Each of the departments is presented under the headings as given in the table below, separately and completely, and in alphabetical order, and courses are described fully in the order of the letters.

FIRST YEAR WORK

Anatomy a, b, c, d.	Physics.
Chemistry a, b, c, d.	Physiology and Physical Diag-
Histology a, b, c.	nosis a, b, c.
Dental Anatomy a, b.	Prosthetic Technics a, b, c, d, e.
Operative Technics c, d, e, f, g, h.	

SECOND YEAR WORK

Chemistry e, f.	Operative Dentistry i, j, k.
Histology d, e, f, g.	General Pathology a, b.
Materia Medica and Therapeutics	Physiology d.
a, b, c.	Prosthetic Dentistry f, g, h, i.
Bacteriology w, x.	Surgical Anatomy a.

THIRD YEAR WORK

Comparative Anatomy, a.	Anaesthesia, g, h, i.
Ethics, Jurisprudence, and Dental	Radiography, j.
Economics, a, b.	Orthodontia, a, b, c.
Operative Dentistry, l, m, n, o,	Pathology and Therapeutics, a, b,
p, q.	c, d, e, f, g, h.
Oral Surgery, a, b, c, d, e, f.	Prosthetic Dentistry, j, k, l.

Schedule of Work

THREE YEARS COURSE

FIRST YEAR

	Hours a week		Hours a year	
	Recitation	Laboratory	Recitation	Laboratory
Anatomy	1	9	32	288
Histology	1	3	32	96
Chemistry	2	6	64	192
Physiology and Physical Diag-				
nosis	2		64	
Physics		3		96
Prosthetic Dentistry	1	6	32	192
Dental Anatomy }	1	6	32	192
Operative Technics }				
	8	33—41	256	1,056—1,312

SECOND YEAR

	Hours a week		Hours a year	
	Recitation	Laboratory	Recitation	Laboratory
Chemistry	1	3	32	96
Histology	1	3	32	96
Physiology	1	3	32	96
Pathology	1	3 (1 Sem.)	32	48
Materia Medica	2	3 (1 Sem.)	64	48
Bacteriology	1	3	32	96
Operative Dentistry	2		64	
Prosthetic Dentistry	1	3	32	96
Surgical Anatomy	(Small Groups)			16
Clinical Operative and Prosthetic Dentistry .....	..	15		480
	10	33-43	320	1,072-1,392

THIRD YEAR

	Hours a week		Hours a year	
	Recitation	Laboratory	Recitation	Laboratory
Dental Pathology	2		64	
Mouth Hygiene	1 (1 Sem.)		16	
Jurisprudence and Ethics	1 ($\frac{1}{3}$ year)			
Dental Economics	1 ($\frac{1}{3}$ year)		32	
Dental Radiography	1 ($\frac{1}{3}$ year)			
Comp. Dental Anatomy	1 (1 Sem.)		16	
Anesthesia	1 (1 Sem.)		16	
Oral Surgery	1	2 (Clinic)	32	64
Operative Dentistry	{ 2 (1 Sem.) 1 (1 Sem.)		48	
Prosthetic Dentistry			32	
Orthodontia	1		32	
Practical Clinical and Laboratory in Orthodontia, Operative and Prosthetic Dentistry				
	9	32 34-43	288	1,024 1,088-1,376 4,080

FOUR YEARS COURSE

Optional beginning 1915-1916. Required beginning 1917-1918.

FIRST YEAR*

	Hours a week		Hours a year	
	Recitation	Laboratory	Recitation	Laboratory
English	3		96	
Mathematics	3		96	
Biology	2	4	64	128
Anatomy	1	6	32	192
Chemistry, General	2	5	64	160
Prosthetic Dentistry	1	6	32	192
	12	21-33	384	672-1,056

*Part of this course in the College of Liberal Arts.

SECOND YEAR

	Hours a week		Hours a year	
	Recitation	Laboratory	Recitation	Laboratory
Anatomy	1	6	32	192
Histology	1	3	32	96
Chemistry, Organic	2	6	64	192
Physics	2	4	32	128
Physiology	2	3	64	96
Operative Technics }	1	6	32	192
Dental Anatomy }				
	<u>9</u>	<u>28—37</u>	<u>256</u>	<u>896—1,152</u>

THIRD YEAR

	Hours a week		Hours a year	
	Recitation	Laboratory	Recitation	Laboratory
Physiology	1		32	
Pathology, General	1	3 (1 Sem.)	32	48
Bacteriology	1	3	32	96
Materia Med. and Therap.	1	3 (1 Sem.)	32	48
Histology, Dental	1	3	32	96
Operative Dentistry	2		64	
Prosthetic Dentistry	1	3	32	96
Surgical Anatomy	(Small Groups)			16
Clinical Operative and Pros- thetic Dentistry		<u>20</u>		<u>640</u>
	<u>8</u>	<u>32—40</u>	<u>256</u>	<u>1,040—1,296</u>

FOURTH YEAR

	Hours a week		Hours a year	
	Recitation	Laboratory	Recitation	Laboratory
Dental Pathology	2		64	
Mouth Hygiene	1 (1 Sem.)		16	
Jurisprudence and Ethics	1 ($\frac{1}{3}$ year)			
Dental Economics	1 ($\frac{1}{3}$ year)		32	
Dental Radiography	1 ($\frac{1}{3}$ year)			
Comp. Dental Anatomy	1 (1 Sem.)		16	
Anesthesia	1 (1 Sem.)		16	
Oral Surgery	1	2 (Clinic)	32	64
Operative Dentistry	{ 2 (1 Sem.) 1 (1 Sem.)		48	
Prosthetic Dentistry	1		32	
Orthodontia	1		32	
Practical Clinical and Laboratory in Orthodontia, Operative and Prosthetic Dentistry		<u>32</u>		<u>1,024</u>
	<u>9</u>	<u>34—43</u>	<u>288</u>	<u>1,088—1,376</u>
				<u>4,880</u>

Anatomy

PROFESSOR VANTUYL, DR. BROWN, AND ASSISTANTS

FIRST YEAR

a. *Osteology of the Entire Body*—Twelve weeks, one lecture and recitation each week. Professor VanTuyl.

b. *Syndesmology and Myology*—Four weeks, one lecture and recitation each week. Professor VanTuyl.

c. *Angeology, Neurology, Organs of the Senses, and Splanchnology*—Sixteen weeks, one lecture and recitation each week. Professor VanTuyl.

d. *Human Dissections*—Throughout the year. Class divided in sections, each section three three-hour periods each week. Professor VanTuyl, Dr. Brown, and Assistants.

The entire human body is dissected and is divided into five parts or groups, namely: The Head and Neck, the Thorax, the Upper Extremities, the Lower Extremities, and the Abdomen.

Chemistry

PROFESSOR GORDIN AND ASSISTANTS

FIRST YEAR

a. *General and Inorganic Chemistry*—Lectures and recitations. First semester. Class divided in sections. Two hours a week. Professor Gordin.

b. *Chemical Laboratory*—Illustrative experiments in General and Inorganic Chemistry. First semester. Class divided into sections, each section six hours a week. Professor Gordin and Assistants.

c. *General and Inorganic Chemistry*—Lectures and recitations. Second semester. Class divided in sections. Two hours a week. Professor Gordin.

d. *Laboratory*—The metals and their compounds. Qualitative chemical analysis of unknown mixtures, particularly bases and alloys. Second semester. Class divided into sections, each section six hours a week. Professor Gordin and Assistants.

SECOND YEAR

e. *Organic Chemistry*—Lectures and recitations. Class divided in sections. One hour a week throughout the year. Professor Gordin.

f. *Laboratory*—Quantitative chemical analysis of dental alloys, etc. Refining of gold, silver and other metals. Laboratory study of cements and other filling materials. Assay of dental alloys for gold, silver, tin, platinum. Practical problems of dental chemistry. Illustrative experiments in Organic Chemistry. Analysis of saliva. Urine analysis. Class divided into sections, each section three hours a week. Professor Gordin and Assistants.

Comparative Dental Anatomy

PROFESSOR BEBB

THIRD YEAR

a. *Evolution*—The meaning of similarity of structure; natural selection; changes in organs; correlation of growth between parts; principles of heredity and of fixity of species; tooth forms; definitions and descriptions of the varieties of forms; the typical mammalian dentation; classification of the animal kingdom, with concise descriptions of the typical characteristics of each. One semester. One lecture and recitation a week. Professor Bebb.

Professional Ethics, Dental Jurisprudence, and Dental Economics

PROFESSOR NOYES AND DR. KOCH

THIRD YEAR

a. *Ethics*—Elementary principles of ethics; professional ethics; state laws relating to dentistry; Illinois dental law; dental jurisprudence; general review. One lecture a week. Twelve weeks. Professor Edmund Noyes.

b. *Dental Economics*—This course embraces practice building, methods of obtaining and retaining patients, business relations between the dentist and his patients, fees, accounts, records of operations, presentation and collection of accounts, methods of economy in the conduct of an office. Ten weeks. One lecture a week. Dr. Koch.

Histology

PROFESSOR EISENSTAEDT AND ASSISTANTS

FIRST YEAR

a. *Lecture Course*—The construction and the use of the microscope. A study of cell structure and functions, of the elementary tissues; histology of the organs; circulatory, lymphatic, alimentary

tract, and accessory glands, respiratory system, urinary organs, and skin. One lecture and recitation a week throughout the year. Professor Thomas.

b. *Laboratory Course*—A laboratory study of the subjects of the lecture course. Class divided into sections, each section one three-hour period a week throughout the year. Professor Thomas and Assistants.

c. *Quizzes and Recitations*—One hour a week throughout the year, during laboratory hours.

SECOND YEAR

d. *The Dental Tissues*—Enamel; the peridental membranes; periosteum; bone; mucous membranes and other soft tissues of the mouth. One and two-thirds semesters. One lecture and recitation a week. Professor Thomas.

e. *Embryology*—A short course. One lecture and recitation a week. One-third of a semester. Professor Thomas.

f. *Laboratory Course*—A laboratory study of the subjects of lecture courses d and e. Class divided into sections, each section one three-hour period a week throughout the year. Professor Thomas and Assistants.

g. *Quizzes and Recitations*—One hour a week throughout the year, during laboratory hours.

Physiology

PROFESSOR WIGGIN

FIRST YEAR

a. *General Physiology*—The structure of the elementary tissue; the chemical composition of the body; the blood; the circulation of the blood. First semester. Two lectures and recitations a week. Professor Wiggin.

b. *Respiration*—Secretion; food digestion; metabolism; nutrition and diet; animal heat; excretion; muscle; nerve physiology; production of voice. Second semester. Two lectures and recitations a week. Professor Wiggin.

c. *Physical Diagnosis*—Class divided into small sections, each section one hour a week during four weeks.

SECOND YEAR

d. *The Central Nervous System*—Brain; spinal cord; reproductive organs; development. Lectures and recitations. One hour a week throughout the year. Professor Wiggin.

e. *Laboratory Course*—Class divided into sections, each section one three-hour period throughout the year. Professor Wiggin and Assistants.

General Pathology

PROFESSOR POTTS

SECOND YEAR

a. *Etiology of Disease*—Disorders of nutrition and metabolism; diabetes; fever; general circulatory disturbances; local hyperemia; local anemia; hemorrhage; embolism; infarction; thrombosis; retrogressive processes; atrophy; infiltrations and degenerations; necrosis; inflammation; progressive tissue changes; neoplasms; infections; granulomata; bacteria, and diseases caused by them. Lectures and recitations. One hour a week throughout the year. Professor Potts.

b. *Quiz Class in Sections*—Second semester. *Laboratory Course*—Class divided into sections, each section three hours a week. Professor Potts and Assistant.

Operative Dentistry, Dental Pathology, and
BacteriologyPROFESSOR G. V. BLACK, PROFESSOR A. D. BLACK, PROFESSOR WILLARD,
PROFESSOR GETHRO AND ASSISTANTS

DENTAL ANATOMY

FIRST YEAR

a. *Descriptive Anatomy of the Human Teeth*—Nomenclature. First semester. One lecture or recitation a week. Professor Gethro.

b. *Laboratory Course*—Studies of the forms of individual teeth; carving the tooth forms in bone or ivory; dissections and studies of the internal parts—pulp chambers and root canals. First semester. Nine hours a week. Professor Gethro and Assistant.

OPERATIVE TECHNICS

FIRST YEAR

c. *Instruments and Instrumentation*—A study of instrument forms, instrument construction, and the adaptation of instruments

to the excavation of cavities. First third of second semester. One lecture and recitation a week. Professor Gethro.

d. *Laboratory Course*—First third of second semester. Nine hours a week. Professor Gethro and Assistants.

e. *Cavity Nomenclature*—A study of the location of cavities in extracted teeth, of the forms of prepared cavities, of the naming of internal parts of cavities, and of the use of instruments in their preparation. Second third of second semester. One lecture and recitation a week. Professor Gethro.

f. *Laboratory Course*—Second third of second semester. Nine hours a week. Professor Gethro and Assistants.

g. *Filling Materials and Filling Teeth*—Last third of second semester. One lecture a week.

h. *Laboratory Practice*—Filling materials and filling prepared cavities; extracted teeth, ivory, or bone. Last third of second semester. Nine hours a week. Professor Gethro and Assistants.

OPERATIVE DENTISTRY

SECOND YEAR

i. *Technical Procedures in Cavity Preparation*—Cavity nomenclature; cavity preparation; principles, instruments and appliances, and instrumentation; cavity preparation, by classes of cavities. One lecture and recitation a week throughout the year. Professor Holland.

j. *Technical Procedures in Filling Teeth*—Filling materials; instruments and instrumentation, physics of filling operations, and of finishing fillings. Porcelain inlays; preparation of cavities; formation of matrix; making and inserting inlays; gold inlays. Filling with amalgam, cements, gutta-percha. Exposure and removal of dental pulp. Preparation and filling of root canals. One lecture and recitation a week throughout the year. Professor Holland.

k. *Operative Clinic*—Open to second year students three hours a day during the entire season. Operations amounting to one hundred points required in gold, and one hundred points in amalgam fillings. Credit points are given for fillings ranging from one to ten points. The location of the cavity, the operative difficulties encountered, and the excellence of the completed operation determine the amount of points earned in each case. During the past three years the average number of points given for fillings has been six for each filling. Professor A. D. Black, Professor Gethro, Professor Holland, and Assistants.

OPERATIVE DENTISTRY

THIRD YEAR

1. *Review of Technical Procedures in Filling Teeth*—One lecture and recitation a week throughout the year. Professor Willard.

m. *Pathology of Dental Caries*—Bacteriology of the human mouth; causative relation of bacteria to dental caries; caries of enamel; caries of dentin; inception and progress of dental caries; conditions of the beginning of dental caries; systemic causes of dental caries; susceptibility and immunity to dental caries; vital phenomena in dental caries; hyperesthesia of dentin; treatment of dental caries; curative effect of fillings; selection of filling materials. First semester. One lecture and recitation a week. Professor A. D. Black.

n. *Management of Patients*—Cleanliness; evil habits in chewing food, and their correction. Management of special conditions. Management of cavities by classes; extension for prevention and its limitations; esthetic considerations. Erosions, management of cases of erosion. Atrophy; management of cases of atrophy. First half of second semester. One lecture and recitation a week. Professor A. D. Black.

o. *The Childhood Periods*—Management of children; the special pathological conditions of the teeth, their membranes, the gums, etc.; treatment of caries of the deciduous teeth. The shedding of the deciduous teeth; accidents of the shedding process. Growth and absorption of the roots of deciduous teeth. Growth to completion and reduction of the size of the apical foramen of the permanent teeth. Second half of second semester. One lecture and recitation a week. Professor A. D. Black.

p. *Operative Clinics*—Open to third year students from 10:30 to 5:30 daily during term time. Operations amounting to two hundred points are required in gold, and two hundred points in amalgam. Professor G. V. Black, Professor A. D. Black, Professor Gethro, Professor Holland and Assistants.

q. *Special Fillings*—Fillings are made under the instruction and immediate supervision of the special clinical instructors, and later full written descriptions of the conditions indicating the operation, the instrumentation and choice of instruments used are submitted by the student. These fillings are included in the clinical point requirement, but are made under special Instructors for the particular purpose of observing and grading the quality of the operations and the skill of the operator. Dr. Macfarlane.

DENTAL PATHOLOGY AND THERAPEUTICS

THIRD YEAR

r. *Review of the Structure and Functions of the Dental Pulp*—Hyperemia and inflammation of the pulp; capping exposed pulps; obtunding sensitive dentin. Pulp devitalization; pulp removal; treatment of canals; root filling; suppuration; the healing process; immunity and susceptibility; suppuration of the dental pulp; alveolar abscess; absorption of roots of teeth and of bone; caries of bone; necrosis. A study of germicides and antiseptics with laboratory tests. Bleaching teeth. First semester. One lecture and recitation a week. Professor A. D. Black.

s. *Peridental Membranes*—Review of histological structures; simple gingivitis; calcic inflammation; phagedenic pericementitis; replantation and transplantation of teeth; functions of the mucous membranes of the mouth; stomatitis; prophylaxis; mouth hygiene. First half of second semester. One lecture and recitation a week. Professor A. D. Black.

t. *Preventive Treatment and Oral Prophylaxis or Mouth Hygiene*—Preventive measures which may be employed by both dentist and patient. Cleanliness and care in relation to the health of the soft tissues. The relation between operative and prosthetic procedures to the diseases of the soft tissues. Second half second semester. One lecture a week. Professor A. D. Black.

u. Quizzes, one hour per week throughout the year. Professor Willard.

v. *Clinical Practice*—In addition to the above courses, third year students are required to make two hundred points in practical treatments in the Infirmary clinic, and to send in for examination and criticism a complete history of the conditions found and the treatment record of each of ten cases.

Bacteriology

SECOND YEAR

w. *Principles of Bacteriology*—The preparation of culture media; management of laboratory cultures; distinguishing varieties of micro-organisms in laboratory cultures; physiology of micro-organisms; poisons produced by micro-organisms; diseases caused by micro-organisms, particularly those of the teeth and mouth; susceptibility

and immunity to diseases. One lecture and recitation a week throughout the year. Professor Willard.

x. *Laboratory Work*—Preparation of culture media; planting and management of cultures; separation of species in mixed cultures; deriving pure cultures from infected animals; cultures from saliva, from mucous membranes and from carious teeth; staining, mounting, and microscopic studies; diagnosis of unknowns. Class divided into sections, each section three hours a week throughout the year. Professor Willard.

Oral Surgery

PROFESSOR GILMER, PROFESSOR POTTS, DR. MEYER,
AND ASSISTANTS

SECOND YEAR

a. *Surgical Anatomy*—In small groups, sixteen hours. Dr. Meyer.

THIRD YEAR

a. *Surgical Bacteriology*—Inflammation; suppuration; wounds; hemorrhage; necrosis; caries of bones; disease of the maxillary sinus, resection of roots; tetanus; ankylosis; arthritis; facial neuralgia; fractures; dislocations; extraction of teeth; malposition of third molars; impacted teeth; replantation, transplantation, and implantation of teeth; cleft palate and harelip; affections of the lips, tongue and mouth; tumors; odontomes; ranula; cysts; aneurisms. One lecture and recitation a week throughout the year. Professor Gilmer.

b. *Recitations and Quizzes*—One hour a week throughout the year. Dr. Meyer.

c. *Surgical Clinic*—Two hours a week throughout the year. Professor Gilmer, Professor Potts, Dr. Meyer, Assistants and nurses from St. Luke's Hospital.

d. *Special Clinical Instruction*—Diagnosis and case histories. One hour a week. Dr. Meyer.

e. *After-Treatment of Surgical Cases*—By students, under direction of Professor Gilmer.

f. *Clinic in the Extraction of Teeth, daily*—Open to second and third year students. Dr. Freeman.

g. *The Evolution of General Surgical and Local Anaesthesia and Analgesia*—State of the patient; nature of operation; choice of anaesthetic; prolonged dental operations; circumstances of administration; inspection and examination of patients; general anaesthetic agents; local and regional anaesthetics, dangers of anaesthesia; ether, chloroform, nitrous oxid; nitrous oxid and oxygen for anaesthesia and analgesia. Second semester. One hour a week. Professor Potts and Assistants.

h. *Clinical Administration of Anaesthetics*—Oral surgery clinic. Two hours a week. Professor Potts and Assistants.

i. *Clinical Exhibition of Nitrous Oxid Anaesthesia*—Daily in extracting clinic. Dr. Freeman.

j. *Radiography*—Five lectures and daily clinical instruction. Dr. Leach.

Materia Medica and Therapeutics

PROFESSOR POUNDSTONE AND ASSISTANTS

SECOND YEAR

a. *The Sources and Various Forms of Drugs*—General and local action of drugs; agencies that modify the action of drugs; the art of prescribing medicines; a critical study of about one hundred drugs, classified according to their therapeutic and toxic action; a special laboratory study of escharotics, germicides, antiseptics, deodorizers. Systematic medication for dental purposes; dental prophylaxis; the use of germicides, antiseptics, escharotics, and astringents in dentistry. First semester. Two lectures and recitations a week. Second semester. One lecture and recitation a week. Professor Poundstone and Assistants.

b. *Theses*—Each student is required to write five theses, of not less than three hundred words each, on subjects assigned.

c. *Clinical Practice*—The Infirmary is open to second year students four hours a day for the observation of conditions requiring the use of drugs and for clinical practice in their treatment. Each student is required to make one hundred points in clinical experience. See also Dental Pathology and Therapeutics.

d. *Laboratory Course*—Second semester. Class divided into sections, each section three hours a week. Professor Poundstone and Assistants.

Orthodontia

PROFESSOR SELLERY, DR. BUCKLEY, AND ASSISTANTS

THIRD YEAR

a. *Occlusion and Facial Art*—Etiology, classification, diagnosis of malocclusion. The alveolus and alveolar processes, the peridental membranes, and use of models. First semester. One lecture and recitation a week. Professor Sellery and Assistants.

b. *Regulating Appliances, Angle, Guilford, Knapp*—Anchorages, jack screws, levers, traction screws, extension arch and combinations, split plates, reciprocal anchorages, retention. Illustrated with models, with movable teeth and enlarged appliances. Stereopticon views, illustrating progressive regulation and final fixation. Second semester. One lecture and recitation a week. Professor Sellery and Assistants.

c. *Clinic or Infirmary Course*—Open to students during first and second semesters for practical work in the correction of practical cases. Professor Sellery, Dr. Buckley, and Assistants.

Prosthetic Dentistry

PROFESSOR PROTHERO AND ASSISTANTS

FIRST YEAR

a. *Prosthetic Technics*—This course covers the fundamental principles of denture construction and crown and bridge work, and accompanies the laboratory course. First semester. One lecture and recitation a week. Professor Prothero and Assistants.

b. *Laboratory Course*—Impression taking, model constructing, occluding, waxing, flasking; packing, vulcanizing, and finishing partial and full artificial dentures. First semester. Six hours a week. Professor Prothero, and Assistants.

c. *Metallography*—A descriptive course on the nature and physical properties of metals, especially those used in dentistry, with fundamental principles of their uses; the manipulation of metals, swaging, annealing, solders, and soldering, welding, tempering. Second semester. One lecture and recitation a week. Professor Prothero and Assistants.

e. *Laboratory Course*—Construction of dies and counter dies; swaging metal bases of German silver; attaching teeth by soldering and by vulcanite; construction of crowns and dummies, all metal, and metal and porcelain; assembling individual crowns and dum-

mies to form bridges; constructing and tempering taps and dies of steel; drawing wire and tubing suitable for the construction of orthodontia appliances. Second semester. Six hours a week. Professor Prothero, Dr. Stout, and Assistants.

SECOND YEAR

f. *Lecture Course*—Review of technic principles outlined in first year; their application to practical operations in the Infirmary. The physical properties of plaster of Paris and other materials employed in prosthesis. Muscles of mastication; force of the bite; movements of the lower jaw; natural arrangement and occlusion of artificial teeth. One lecture and recitation a week. Professor Prothero and Assistants.

h. *Laboratory Course*—Construction of full metal and partial metal base dentures, with teeth attached by soldering and by vulcanite; construction and application of clasps to partial dentures; advanced work in crowns and bridges. Three hours a week. Professor Prothero, Dr. Stout, and Assistants.

i. *Prosthetic Clinic*—Each student is required to carry to completion for patients a number of practical cases, representing each of the various classes of prosthesis, amounting to at least one hundred points in crowns and bridges and one hundred points in plate work. Professor Prothero, Professor Postle, and Assistants.

THIRD YEAR

j. *A Critical Review*—Summary of recent methods and appliances; application of porcelain in prosthesis; baked porcelain crowns; porcelain bridges, full porcelain dentures; methods of cavity preparation for porcelain inlays; forming, baking, and setting porcelain inlay. Methods of obtaining wax models of cavities, forming investments, and casting, and setting gold inlays. The student is assigned a series of articles for reading, and is required to present a thesis covering the subject named. One lecture and recitation a week. Professor Prothero and Assistants.

k. *Laboratory Course*—Cast aluminum base dentures; celluloid dentures; banded Logan crowns; baked porcelain crowns; porcelain bridges; continuous gum dentures. Professor Prothero, Professor Postle, and Assistants.

l. *Prosthetic Clinic*—Practical pieces of prosthetic work of all varieties made and fitted for patients in the Infirmary. Studies of the condition of the mucous membranes; the preparation of roots

for crowns and the abutments of bridges; making and setting crowns and bridges, and preparation of cavities and setting porcelain or gold inlays. The minimum requirement is two hundred points in crowns and bridges and two hundred points in plates.

Infirmaries

The Operative, Prosthetic, and Orthodontic clinic is open to students' infirmary practice from 10 A. M. to 5 P. M. each week day during the school year, and from 9 A. M. to 5 P. M. of each week day during the summer vacation. It is at all times abundantly supplied with patients. It is the intention that this infirmary practice shall be as much like an actual dental practice as possible. The development of the ability to obtain and hold a practice, the observance of professional courtesy toward patients essential to personal success, is regarded equal in importance to the development of manipulative ability.

General Statements

REQUIREMENTS FOR DEGREE

The degree of Doctor of Dental Surgery is conferred upon students recommended therefor by the Faculty of the School. Candidates are recommended who have attended the required courses of lectures, who have passed satisfactorily all required examinations in the subjects of study; who have completed the required clinical and laboratory work; who in the judgment of the Faculty are of fit moral character and are 21 years of age; and who have discharged in full all financial obligations to the University.

THE LIBRARY AND READING ROOM

The Menges Library and Reading Room, named in honor of the late Dr. Theodore Menges, occupies, together with the attached Journal Reading Room, three thousand eight hundred feet of floor space. It is furnished with reading tables and chairs for about one hundred students. The Library contains 3,338 volumes of books on dental and collateral subjects; a fine supply of dictionaries and encyclopedias conveniently placed in the Reading Room for easy consultation; and a nearly complete list of the dental journals that have been published in the English language, with about 17,000 duplicate numbers. The books most used by the students are duplicated, up to

six or twelve, and a few to fifteen copies. The books and journals may be used in the Reading Room without restriction, and when the duplication of volumes will allow, they may be drawn out as a circulating library. The library will be open week day evenings during the school year until ten o'clock P. M. excepting Saturdays.

THE MUSEUM

The Museum is in the Reading Room and is open to inspection and study. The cases are arranged to show the specimens to the best advantage.

The comparative anatomy specimens are, with the exception of the gorilla and chimpanzee, of which there are full skeletons, heads with the teeth. There is a sufficient number of varieties of each of the several orders to afford specimens of every kind of tooth form and of every variety of placement in mammals, saurians, and snakes, with a large variety of fishes.

The principal specimens of human skulls are, first, an excellent mounting of the separated bones of the adult; second, a fine set of dissections in a series showing the development of the teeth and the roots from the first appearance in the fetus to the full adult development, and illustrating the absorption of the roots of the deciduous teeth, the shedding process, and the replacement by permanent teeth; also the absorption of the alveolar processes after the loss of teeth, with the changes that occur in the form of the bones of the jaws from childhood to old age. This is an exceptionally complete and valuable set of specimens. There is also a variety of ordinary human skulls.

The Museum contains also a valuable collection of human teeth of abnormal forms; a very full and complete set of specimens illustrating interproximal wear and the flattening of the points of interproximal contact. It is especially rich in casts of cases of supernumerary teeth; some illustrations of the very early forms of artificial teeth, of manufactured porcelain teeth, and of dental instruments, illustrating the development in these lines. This collection has been made in the School largely by students and by alumni, and is being continually increased by donations from those who have met with specimens unusual or rare in practice. Such donations are requested from all practitioners to assist in building up this great museum of abnormal conditions of teeth and of associated parts for the benefit of dental education.

HONORS

A dental scholastic honor society, the Omicron Kappa Upsilon, has been formed upon the initiative of Northwestern University Dental School.

Membership is awarded to students who throughout their dental course have met every requirement without condition or failure, and whose record of grades earned during their entire course gives them highest rank. Only twelve per cent of the graduating class of each year can achieve the honor of such membership.

TEXT-BOOKS

Text-books will be on sale in the Theodore Menges Library of the school at publishers' prices. There will be a small profit from the sale of these books, which will be used for the benefit of the library. Students are invited to purchase their books in the school and aid the library. Each student will be required to have the books designated below before participating in either recitation or laboratory exercises. The Reference books are in the library and may be used as needed.

FIRST YEAR

- Anatomy*—Cunningham (new edition). \$6.00 Cloth. \$7.00 Sheep.
 Cunningham's Dissector—head, neck and thorax. \$2.75.
Dental Anatomy—Black. \$2.50.
Operative Dentistry—Black. \$10.00.
Prosthetic Dentistry—Prothero. \$7.50.
Physiology—Stewart. \$4.00. Wiggin. \$2.00.
Gordin's Inorganic Chemistry—\$3.00.
Exercises in Chemistry for Laboratory—McPherson & Henderson. 40 cents.
Histology—Bailey. Ed. 1914. \$3.50.
Medical Dictionary—Stedman. \$4.50. Gould. \$1.00.

SECOND YEAR

- Anatomy*—(Same as first year.)
Operative Dentistry—Black. (Same as first year.)
Prosthetic Dentistry—Prothero. (Same as first year.)
Physiology—Kirk. \$3.00. (In 1916-17 and thereafter Stewart.)
Materia Medica—Prinz. \$3.00.
Pathology—Adami & McCrea. \$5.00.
Chemistry—First Principles in Organic Chemistry—Gordin's. \$2.50.
Comparative Anatomy—Underwood. \$1.00.
Histology—Noyes. Dental Histology and Embryology. \$4.50.

THIRD YEAR

- Operative Dentistry*—Black. (Same as first and second years.)
Prosthetic Dentistry—Prothero. (Same as first and second years.)
Oral Surgery—Blair's Special Surgery of the Mouth. \$5.00.
Orthodontia—Angle. \$5.00.
Dental Ethics and Jurisprudence—Noyes.
Bacteriology—Williams. \$2.00.
Anesthesia—Hewett.
Dental Pathology—Black. \$6.00.

REFERENCE BOOKS

American System of Dentistry.
Manual of Plate Work—Haskell.
Crown and Bridge Work—Evans.
Diseases and Injuries of the Teeth—Smales and Colyer.
Principles of Surgery—Senn.
The American Text-Book of Prosthetic Dentistry—Essig or Turner.
The American Text-Book of Operative Dentistry—Kirk.
Micro-Organisms of the Human Mouth—Miller.
Micro-Organisms—McFarland.
Dental Pathology and Pharmacology—Burchard.
Long's Chemistry.
Gray's Anatomy.
Comparative Dental Anatomy—Tomes, Thompson.
Regional Anatomy of the Head and Neck—Eckley.
Anatomy—Morris, Eckley.
Histology—Piersol, Stohr, Lewis, Sobotta.
Materia Medica—Stevens, Butler.

INSTRUMENTS

The instruments essential to the students in the several departments of the school have been carefully studied and determined. Much care has been taken in the selection of the instrument sets that the variety of forms may be sufficient for the student's needs without being excessive. Close study of this subject and long, careful observation of students and the progress they make in the attainment of manipulative skill show their progress to be closely related to their instrument equipment. Therefore this school must demand that the instrument sets *required* be obtained by each student as a condition to his continuance in school work.

In operative dentistry it is found that a close adherence to the formula plan, in the study of cutting instruments particularly, is essential in teaching the important subject of cavity preparation, and this will be carried out critically in all the departments of the school. This teaching is begun in the technic classes and the same lines of instruction are followed progressively by teachers and demonstrators in all of the departments to the end of the Senior year, the same instrument sets being used throughout the course of study.

In prosthetic dentistry and in the several laboratories a similar care as to instruments is maintained.

The instruments in the list are *required* because they are essential to the student's progress, and students must provide them. *Students should not bring with them, nor purchase, instruments of other patterns, for they cannot be received as equivalents of the required sets.* They are the same as those that have been required in former years. No student is required to make changes in his instrument sets during his three years' course, and these instruments form his instrument equipment for entering practice after graduation.

INSTRUMENTS AND APPLIANCES REQUIRED to be of form and quality to be approved by the school. Each student will be required to present a card from the proper official of the school showing that he has his complete equipment, before he will be permitted to participate in either recitation or laboratory exercises. This card may be obtained on or after September 27, 1915.

FRESHMAN YEAR

CUTTING INSTRUMENTS.

ORDINARIES.

HATCHETS.

12-5-6
8-3-6
6-2-6
12-5-12
8-3-12
6-2-12
12-5-23
8-3-23
6-2-23

HOES.

12-5-6
8-3-6
6-2-6
12-5-12
8-3-12
6-2-12
12-5-23
8-3-23
6-2-23

SPECIALS.

ENAMEL HATCHETS.

Right, 20-9-12
Right, 15-8-12
Right, 10-6-12

Left, 20-9-12
Left, 15-8-12
Left, 10-6-12

SPOONS.

Right, 20-9-12
Right, 15-8-12
Right, 10-6-12

Left, 20-9-12
Left, 15-8-12
Left, 10-6-12

GINGIVAL MARGIN TRIMMERS.

Right, 20-(95)-9-12
Right, 20-(80)-9-12
Right, 15-(95)-8-12
Right, 15-(80)-8-12

Left, 20-(95)-9-12
Left, 20-(80)-9-12
Left, 15-(95)-8-12
Left, 15-(80)-8-12

BIN-ANGLE CHISELS.

20-9-6
15-8-6
10-6-6

STRAIGHT CHISELS.

20
15
10

SIDE INSTRUMENTS.

HATCHETS.

5-3-28

3-2-28

CLEOID.

20-2-12

DISCOLD.

20-3-12

AMALGAM PLUGGERS.

30x10-7-12
35-7-12

1 Explorer, No. 3.
1 each, Plugger Points, University.
6x12-6-10 Parallelogram.
5-10-3 Round.
10-10-3 Round.
20x5-2-18 Foot.
Automatic Handle, No. 4.

10x30-7-12
15-7-12

1 Black's special holding instrument.

1 each, Burnishers, Nos. 2, 26, 28.

1 Instrument Roll.

1 Hand Mallet, No. 5.

1 pair Foil Carriers, No. 12.

1 Cement Spatula, No. 24.

1 Mixing Tablet, No. 2.

1 Mortar and Pestle, No. 2.

1 oz. Absorbent Cotton.

1 Arkansas Stone, 2x5x $\frac{3}{8}$ inches.

1 Bottle of Oil.

1 Root Canal Plugger, No. 35.

1 Root Canal Plugger, No. 36.

1 box narrow Polishing Strips, assorted.

2 Broach Holders, handles of dissimilar color.

1 package Barbed Broaches, assorted.

1 box round gutta-percha root canal points, assorted.

1 Alcohol Lamp with Annealing Tray.

1 sheet Steel for Matrices, gauge 3-1000.

1 sheet Copper for Matrices, gauge 26.

1 Lowell Pin Vise.

1 Boley Millimeter Gauge.

1 Revolving Head Engine Bit Holder.

1 Pocket Lens, two glasses.

6 Medicine Bottles.

1 each, Engine Burs, Nos. $\frac{1}{4}$, 1, 3, 5, 7, 11, 16.

1 box Piano Wire, length 6 in., gauge 25.

1 Grobet File, half round, 5 in., No. 1.

1 Grobet File, half round, 5 in., No. 3.

SPECIALS FOR FRESHMEN.

NOT REQUIRED AFTER THE FRESHMAN YEAR.

1 Work Box.

1 Card Board arranged for Tooth Sections.

1 Card Board arranged for Instrumentation.

1 set (6) Ivory Carving Blocks.

12 small Wood Blocks for Mounting.

1 Tooth Brush Handle.

1 Stick Black Sealing Wax.

1 Spool Black Silk.

1 piece Brass Tubing for cleaning files, $\frac{3}{16}$ x6 inches.

50 pieces Brass Wire, 4 $\frac{1}{2}$ inches long, gauge 13.

JUNIOR AND SENIOR YEARS

IN ADDITION TO THE INSTRUMENTS AND APPLIANCES USED IN THE FRESHMAN YEAR, THE FOLLOWING ARE REQUIRED IN THE JUNIOR AND SENIOR YEARS.

GOLD FILLING INSTRUMENTS.

- 1 Automatic Mallet.
- 1 each Plugger Points.
 - 5- 1-23, Round.
 - 5- 2-23, Round.
 - 7½-10- 3, Round.
 - 5- 1- 0, Bayonet.
 - 7½- 3- 0, Bayonet.
 - 10x 5- 3- 3, Parallelogram.
 - 5x10- 3- 3, Parallelogram.
 - 12x 6- 6-10, Parallelogram.
 - 15x 5- 5-12, Foot.
 - 15x 5- 3-18, Foot.

FINISHING INSTRUMENTS.

- 1 set of 3 Finishing Knives.
- 1 set of 6 File-cut Finishing Files.
- 1 Black's Saw Frame.
- 1 doz. Kaerber's Saws, one edge.
- 1 doz. Thread Saws.

AMALGAM PLUGGERS.

- 35x15-7-12
- 25x7-12
- 15x25-7-12

SCALERS.

"G. V. Black School Set of Scalers," 12 instruments, as follows:

- 1 pair of Peridental Explorers, 15-8-6, R. and L.
- 1 pair of Pull Scalers, 15, F. and B. (forward and backward curved blades).
- 1 pair of Pull Scalers, 15-8-6, R. and L.
- 1 pair of Pull Scalers, 15-8-12, R. and L.
- 1 pair of Push Scalers, 15-8-12, R. and L.
- 1 Cleoid Scaler, 25.
- 1 Sickle Scaler, 20.

ENGINE AND INSTRUMENTS.

Sizes of Burs are given in tenths of millimeters.

Burs, Round	Sizes	6	8	12	16	20
	Nos.	½	1	3	5	7
1 Cord Driven Dental Engine.						
Burs, Inverted Cone	Sizes	6	8	12	16	20
	Nos.	33½	34	36	38	40
Burs, Fissure, sq. end	Sizes	6	8	12	16	20
	Nos.	55½	56	58	60	62
Burs, Finishing, oval	Sizes	20	25	40	Bud	25
	Nos.	218	219	222	Bud	225
Drills, bi-beveled	Sizes	8	10	12	16	
	Nos.		100	101	102	104
Drills, sq. end	Sizes				8	10
	Nos.				114	115
Contra-angle hand piece and burs for engine.						

- 1 Porte Polisher, No. 307.
- 1 box Wood Polishing Points.
- 2 Mandrels, No. 303.
- 1 Mandrel, Morgan-Maxfield.

- 1 box Emery Paper Disks, ½ inch, grits Nos. 00, 1.
- 1 box each Sand Paper Disks, ⅝ inch, grits Nos. 00, 1.
- 1 box each Cuttlefish Paper Disks, ½ and ⅝ inch.
- 1 doz. Three Cornered Rubber Polishing Disks.

ACCESSORIES.

- 1 "Northwestern" Instrument Case.
- 1 Mouth Mirror, No. 3.
- 1 Rubber Dam Punch.
- 1 Universal Rubber Dam Clamp Forceps.
- 1 pair Special Third-Molar Rubber Dam Clamps, right and left.
- 1 each Rubber Dam Clamps, Nos. 5, 9, 14, 18.
- 1 Hatch Cervical Clamp.
- 1 pair Rubber Dam Clamps for Roots.
- 1 spool of Waxed Floss.
- 1 Rubber Dam Holder.
- 2 Rubber Dam Weights.
- 1 Water Syringe, No. 22.
- 1 Chip Syringe, with valve in the back end.
- 1 Cotton Holder.
- 1 package Barbed Root Broaches, assorted.
- 2 Smooth Broaches.
- 1 Glass Slab for sterilizing broaches.
- 1 sheet Base Plate Gutta-Percha.
- 1 each Explorers, Nos. 3, 13, 14.
- 3 Perry Separators, A, B and C, or
- 1 Universal Separator, Perry or Worsley.

MEDICINE LIST.

- 1 Case Medicine Bottles.
- ½ oz. Peroxid of Hydrogen.
- ½ oz. Oil Cassia, 1; Phenol, 2; Oil Wintergreen, 3.
- ½ oz. Eugenol.
- ½ oz. Eucalyptol.
- ½ oz. Phenol, 95 per cent.
- ½ oz. Tincture of Iodine.
- ½ oz. Glycerine, Iodine and Zinc.
- ½ oz. Tinct. Aconite, 1; Iodine, 1; Chloroform, 1.
- ½ oz. Dialized Iron.
- ½ oz. Tannic Acid.
- ½ oz. Chlora Percha.
- 1 Small Stick of Silver Nitrate.

SURGICAL CASE (Seniors Only).

- 1 Leather Pocket Case.
- 1 Scalpel, 1½-inch blade.
- 1 Tenaculum.
- 1 Sharp Steel Probe.
- 1 Silver Probe.
- 1 Grooved Director.
- 1 Exploring Needle.
- 1 pair Artery Forceps, 4½ inch.
- 1 pair Surgeon's Scissors, 4½ inch, straight.

PROSTHETIC DENTISTRY.

- 1 Plaster Bowl, "B."
- 1 Plaster Spatula, No. 17.
- 1 each Impression Trays, Uppers Nos. 2, 3, 22.
- 1 each Impression Trays, Lower Nos. 3, 15, 25.
- 1 "Improved Snow" Occluding Frame.
- 1 Snow's Face Bow.
- 1 box Pink Wax.
- 1 Prothero's Wax Spatula.
- 1 iron Vulcanite Flask, large size.
- 1 Flask Wrench, No. 10.
- 1 Vulcanite File, D. E., half round, 8 inches.
- 1 each Vulcanite Chisels, Nos. 14, 15.
- 1 each Kingsley's Finishers, Nos. 4, 5, 6.
- 1 Felt Cone, large blunt.
- 1 Felt Wheel, No. 2.
- 1 each Brush Wheels, Nos. 4, 20, 26.
- 2 Lathe Chucks.
- 1 Carborundum Wheel, $1\frac{1}{2} \times \frac{1}{4}$ inch, grit "B."
- 1 Carborundum Wheel, $1\frac{1}{2} \times \frac{1}{4}$ inch, grit "D."
- 1 Mechanical Saw Frame.
- 1 dozen each Mechanical Saws, Nos. 00, 2.
- 1 pair Plate Shears, Heinisch.
- 1 pair Curved Plate Shears, No. 5.
- 1 pair Round-nosed Pliers, $4\frac{1}{2}$ inches, No. 107.
- 1 pair Flat-nosed Pliers, $4\frac{1}{2}$ inches, No. 104.
- 1 pair Prothero's Contouring Pliers.
- 1 Horn Mallet.
- 1 Plate Punch No. 1.
- 1 Solder Tweezers, "A."
- 1 Solder Tweezers, "L."
- 1 pair Reese's Solder Pliers.
- 1 Prothero's Plate Burnisher.
- 1 Compound Blow Pipe.
- 1 Asbestos Soldering Block, No. 2.
- 1 Borax Slate.
- 1 Plate File, Grobert, half round, 5 inches, No. 3.
- 1 Gas Burner, No. 12, with spider.
- 18 inches Rubber Tubing, $\frac{1}{4}$ inch.
- 54 inches Rubber Tubing, $5/16$ inch.
- 1 spool Annealed Iron Wire, 36 gauge.
- $\frac{1}{2}$ lb. Special Asbestos.
- 1 Melotte's Moulding Outfit.
- 3 lbs. Babbitt Metal.
- 3 lbs. Counter-Die Metal.
- 1 set of (2) Casting Rings.
- 1 can Calcar or Moulding Sand.
- 5 dwts. Silver Solder.
- 1 bottle Separating Fluid.
- $\frac{1}{2}$ lb. Modeling Composition.
- 3 sheets Sandpaper, No. 1.
- 4 sheets Red Maroon Rubber.
- 1 bottle Shellac Varnish.
- 1 oz. Powdered Soapstone.
- 1 box Crystal Borax.
- 4 inches Steel Wire, $\frac{1}{4}$ inch diameter.
- 12 inches German Silver Wire, 16 gauge.
- 1 Wire Soldering Frame, 4x4 inches.
- 1 pair Pliers, No. 121.
- 1 pair Plate Nippers, No. 3M.
- 1 Riveting Hammer "B."
- 1 piece of German Silver Plate, 22 gauge.
- 1 piece Aluminum Plate, 18 gauge.
- 1 pair Improved Ivory Cleavers.
- 1 pair Prothero's Files with No. 8 handles.
- 1 pair Crown and Collar Scissors, No. 11.
- 1 pair Contouring Pliers, Benson's.
- 1 pair Improved Hawk-bill pliers.

SPECIAL FOR JUNIORS.

- 1 Martin Screw Plate, holes Nos. 0 to 12, series "B."
- 1 Draw Plate, special.
- $\frac{1}{2}$ lb. German Silver Plate, 28 gauge.
- 12 inches German Silver Wire, 14 gauge.
- 12 inches German Silver Wire, 16 gauge.
- 12 inches Stub's Steel Wire, 93-1000.

SPECIAL FOR SENIORS.

PORCELAIN INSTRUMENTS

- 1 "K" Pliers.
- 1 "K & D" Pin Vise.
- 1 pair Ball Pliers.
- 1 Porcelain Carving Instrument.
- 2 Camel Hair Brushes.
- 1 set Thompson's Burnishers, Nos. 1, 2, 5, 8.

In addition to the above list it is recommended strongly that each student obtain the quadrangle instruments, both the direct and the back-action, and the back-action pluggers to be used by mallet pressure. It is also recommended that each student obtain his own furnace for porcelain work and his own device for casting gold inlays, and make use of these while in school.

SUMMER CLINICS

The clinic rooms will be open all the year for the benefit of students who may wish to have greater experience in clinical practice under competent supervision. The number of demonstrators during the summer will be ample for the class that may choose to remain with the school. The clinical material is abundant, and an excellent opportunity is afforded for clinical practice.

The value and adequacy of the clinical instruction and experience in practice to students is inestimable. The extent of it can be best understood by an examination of the subjoined condensed tabular statement, extracted from the Examiner's report for the year ending June 30, 1915:

1914	General	Special	Total
July	512	222	734
August	621	244	865
September	790	488	1,278
October	715	1,287	2,002
November	653	974	1,627
December	538	701	1,239
1915			
January	751	914	1,665
February	731	993	1,724
March	849	959	1,808
April	658	775	1,433
May	687	530	1,217
June	679	236	915
Carried forward from last year . . . . .	...	...	1,022
	<u>8,184</u>	<u>8,323</u>	<u>17,529</u>

The special patients are assigned to such students of their acquaintance as they ask to have take care of their cases, while the general patients are assigned by the Examiner to such students as need the particular experience and practice that their cases involve. Many of these general patients have come to the school for a number of years and continue to come in the same manner as they would go to the office of a dental practitioner. The school has thus acquired a very large clinic, really large enough for the instruction of a fairly large class of students, but the students are encouraged to have their friends ask for their especial services, as a step in the direction of the teaching of practice building.

The operations performed for these 17,529 patients during the year were 86,229 in the Operative, 5,603 in the Prosthetic, 461 in the Oral Surgery and 1,500 in the Orthodontia Department; a total of 93,793 separate operations. Among the operations performed in the Operative Clinic were:

18,447	fillings of all descriptions.
4,678	root fillings.
1,594	pulps devitalized.
1,927	pulps removed under cocain.
1,259	dead pulps removed.
1,335	other pulp treatments.
170	root canal treatments.
227	alveolar abscess treatments.
4	cases of apical pericementitis treated.
246	cases of pyorrhea treated.
4	bleachings.
5,147	cases of removal of calcareous deposits.
14,574	cases of extraction.
554	cases of administration of general anesthetics.
2,189	cases of administration of local anesthetics.
11	porcelain inlays.
893	cast gold inlays.

In the Prosthetic Department were made and inserted:

290	gold and porcelain bridges.....	1,019	teeth
612	shell crowns	612	teeth
92	Richmond crowns	92	teeth
2	porcelain crowns	2	teeth
270	banded Logan and cast base Davis crowns.....	270	teeth
439	plain Logan or Davis crowns.....	439	teeth
1,545	artificial dentures	14,622	teeth
Total teeth restored or replaced.....		17,056	

There were 1,373 plates, crowns and bridges repaired.

Of the 1,545 artificial dentures inserted there were:

8	gold plates.
2	celluloid plates.
12	aluminum plates.
1,520	vulcanite plates.
3	Watts' metal.

1,545

Fees and Expenses

For the year 1915-1916

Tuition Fee—A year.....\$175.00

This fee may be paid in two or three installments. If paid in two installments, \$90.00 must be paid on day of entrance, and \$88.00 not later than February 20. If paid in three installments, \$63.00 must be paid on day of entrance, \$62.00 on January 20, and \$55.00 on April 20.

Registration Fee—A year\$ 10.00

Breakage Fee—A year 1.00

Final Examination Fee—For Seniors..... 10.00

Locker Fee—For use of a locker for the protection of a student's private property, the student furnishing his own lock, a year50

Time of Payment of Fees—All fees are payable at the beginning of the school year except the final examination fee. The registration fee must be paid when names are enrolled for classes.

Payments should be made in currency or in Chicago exchange drawn to the order of Northwestern University.

Refunds—No fees for instruction or incidentals will be refunded except in cases of sickness. If on account of his serious illness a student withdraws from the School before the end of the school year, a share of his tuition fee may be refunded, provided he secures from the Dean a statement of honorable standing, and from a physician a certificate that his health will not permit him to remain in attendance. No application for a refund will be considered unless made within thirty days after withdrawal from the School on account of sickness.

The registration fee will in no case be returned after a student has been accepted by, and admitted to, the School.

UNIVERSITY NOT RESPONSIBLE FOR PERSONAL LOSSES

The University is not responsible for the loss of any personal property belonging to any of the students in any building owned by the University, whether the loss occurs by theft, fire, or an unknown cause.

STUDENTS' EXTRA FUNDS

Students who bring with them larger amounts of funds than their immediate requirements necessitate may deposit the same in the University business office, in the rotunda on first floor, and draw on this deposit from time to time as needed.

BOARD AND ROOM

Rooms and board may be obtained at \$6.00 to \$9.00 a week. Rooms without board, furnished or unfurnished, may be had at \$6.00 to \$10.00 a month.

A department of the Y. M. C. A. is maintained in our University Building, which looks especially to the students' interest in this direction.

In case students are compelled to do some outside work to assist them while attending school, this department will also endeavor to secure such employment as the student may be able to do without detriment to his educational work.

THE UNIVERSITY DORMITORIES

One of the Dormitories in the University Quadrangle in Evanston is reserved for the students of the Dental School. These buildings are situated on the North Campus near the University Gymnasium, and within a five-minute walk to the Elevated trains with direct service to Chicago.

Applications for the reservation of rooms should be made to the Secretary of the Dental School and should be accompanied by a deposit of \$10.

Course for Graduates and Practitioners

The course opens on June 10, 1916, and continues four weeks, with six days of teaching each week. It includes two hours of lectures and six hours of practical teaching each day, by members of the regular staff of the School. Especial attention is given to porcelain and gold inlays, crowns, bridge work of all kinds, the treatment of pyorrhœa, and the most recent methods in Operative Dentistry, Oral Surgery, and Orthodontia. The studies for 1915 are:

Operative Dentistry—Professor A. D. Black and Professor Gethro.

Histology, as applied to Operative Dentistry—Professor Thomas.

Oral Surgery—Professor Gilmer, Professor Potts, and Assistants. Clinic each Friday.

Dental Pathology and Therapeutics—Professor A. D. Black and Professor Willard. This subject includes diseases of the soft parts, as of the pulp, abscesses, diseases of the gums, etc., met with in the practice of operative dentistry.

Prosthetic Dentistry—Professor Prothero and Assistants.

Orthodontia—Professor Sellery.

Anesthesia—Professor H. A. Potts.

Extracting Clinic with Anesthesia—Dr. Freeman.

Dental Radiography—Dr. F. D. Leach.

PRACTITIONERS' COURSE FEES

<i>Registration</i>	\$ 5.00
<i>Tuition for one subject</i>	45.00
<i>Tuition for two or three subjects</i>	60.00
<i>Tuition for the entire course</i>	70.00

Graduates of Northwestern University Dental School are allowed a reduction of 20 per cent from practitioner's fees.

For further information relating to the Dental School, address The Secretary, Northwestern University Dental School, Chicago, Illinois.

Register of Students, 1914-1915

SENIORS

Adams, Ben Quincy.....	Duncan, Clyde Emerson.....
.....Little Rock, Ark.	.....Johnston City
Aker, Henry Theodore.....	Eaton, William Benjamin...Normal
.....Cotton, So. Dak.	Eggers, Carl Henry..Avon, So. Dak.
Alzeno, Guernsey E.....Chicago	Eldridge, Robert Benjamin..
Andresen, Malcolm...Hixton, Wis.	.....Sioux City, Iowa
Arganbright, Ned A.....	Epstein, Harry .....Chicago
.....What Cheer, Iowa	Esch, Oscar William.....
Auter, Stephen L.....Evanston	.....Manitowoc, Wis.
Bailey, Robert James.....Chicago	Ettelson, Zara Henrietta....
Bailie, Thomas Elmore.....	..Melbourne, Victoria, Australia
.....North Yakima, Wash.	Evans, R. Mercer...Minto, No. Dak.
Baker, Harry Willard.....	Fancher, Frank Harvey.Racine, Wis.
.....New Castle, Va.	Fay, Clifford Tweedie.....
Barmack, Charles.....Chicago	.....St. Paul, Minn.
Barmack, David .....Chicago	Fearn, Harvey..New Franklin, Ohio
Barnes, John Wesley.....	Fink, Herman Reuben.....Chicago
.....Tecumseh, Nebr.	Finn, William Selby.....Chicago
Bartfield, Benjamin.....Chicago	Fried, Isadore Alex.....Chicago
Bower, Richard Leslie.....	Galligan, Judson.....Antigo, Wis.
.....E. Cleveland, Ohio	Geyer, Claude Laurence....
Braskamp, John Laurence...	.....No. Liberty, Ind.
.....Waupun, Wis.	*Gibbon, Harlow Lee.....
Brooks, Anthony Wayne, B.S.	.....Spokane, Wash.
.....Vicksburg, Miss.	Gilbert, Glenn Roy.....
Brundin, John Geissler.....	.....Spring Valley, Minn.
.....Albert Lea, Minn.	Goebel, Edwin Robert.....Lincoln
Buettell, Ernest D..Menno, So. Dak.	Green, Julius Caesar.....Chicago
Burton, Walter Ellis.St. Paul, Minn.	Grosser, Walter William...Chicago
Campbell, Robert Jean.....	Gruener, Joseph.....
.....Boscobel, Wis.	.....Prague, Bohemia
Cassidy, James Edwin.....	Gunnarson, Agnar Theodore.
.....Waukon, Iowa	.....Hallowell, Minn.
Chanoch, Abraham.....Chicago	Hall, Alex. Valfrid.....
Cheese, Laurence.....Evanston, Wis.	.....Mjälley, Sweden
Cohen, Samuel .....Chicago	Halver, Glenn Atwood.....
Cole, Walter E....Lisbon, No. Dak.	.....LeRoy, Minn.
Cook, John Alden.Mt. Vernon, Iowa	Hardan, George Earl.....
Curtis, William R....Tracey, Minn.	.....Blaine, Wash.
Davidson, Christian, Jr....Chicago	Hartgerink, James..Holland, Mich.
Davidson, Claude Lyons....	Hearne, Jack....Goldthwaite, Tex.
.....Newboro, Ont., Can.	Henderson, Lewis Bernhard..
Dawson, Donald Robert.....	.....Velva, No. Dak.
.....Hecla, So. Dak.	Hendrickson, Dora....Omaha, Nebr.
DeLarco, Samuel Michael..Chicago	Henry, Dale.....Okemah, Okla.
Donlevy, Frank Dearden..Maywood	
*Doten, Herbert Allen...Woodstock	
Douglas, Sylvester...Portland, Ore.	
Drew, Alfred James.....Chicago	

*Matriculated but not in attendance
†Did not complete course

- Herzog, Roland Alfred.....
 Sheboygan, Wis.
 Heyduck, John C.....Centralia
 Hines, Leo D...Mantorville, Minn.
 Hohf, Emanuel...Yankton, So. Dak.
 Holmberg, Henry Elexius....
 St. Paul, Minn.
 Homan, Carlton Clark.....
 El Paso, Texas
 Howerly, Benjamin Franklin.
 Black Earth, Wis.
 Hudson, King Claude.....
 Topeka, Kans.
 Huff, Henry N...Independence, Wis.
 Hurley, Roy F.....
 Prairie du Chien, Wis.
 Isenson, Ernest.....Chicago
 Jersin, George Burchard....
 Bergen, Norway
 Jessin, Lloyd A....Rensselaer, Ind.
 Johnson, Christian Emanuel..
 Neenah, Wis.
 Johnson, Howard Alfred....
 Escanaba, Mich.
 Jones, Harry R....Columbus, Wis.
 Juel, Edwin C....Canton, So. Dak.
 Jungman, William...Menno, So. Dak.
 Kaplan, Nathan N.....Chicago
 Kirchner, George C..Peterson, Iowa
 Koch, August Henry.....Chicago
 Kulvinsky, Harry Harold...Chicago
 Lagerholm, Thea.Stockholm, Sweden
 Lam, Wah.....Honolulu, H. I.
 Larson, Elmer V.....Anoka, Minn.
 Lazear, Davies.....Chicago
 Le Grand, Jules.....
 Castries, St. Lucia, B. W. I.
 Lehman, Hubert Joseph.....
 Stewartville, Minn.
 Locher, Lawrence Raymond..
 Monticello, Iowa
 Long, Grace Marie.....
 Eastcote, Pinner, Middlesex,
 Eng.
 Lutterman, Eldredge J.....
 Wellsburg, Iowa
 McCollough, Irvin Randolph.
 Aransas Pass, Tex.
 McIlrath, Hugh Allan.....
 Murwellumbah, N. S. W.,
 Australia
 Mastrud, Conrad Dalvin....
 Hatton, No. Dak.
- *Matlock, Edward Chester...
 Cincinnati, Ohio
 Matsuda, Riichi.....
 Minto City, Warahiken, Japan
 Merrifield, Raymond Hodges.
 Fennimore, Wis.
 Mikolas, Joseph Rupert, Jr..Chicago
 Miller, William H.....Macon, Mo.
 Mounteer, Edwin Webber...
 Regina, Sask., Can.
 Moore, Arthur Roy.....
 Downer's Grove
 Mueller, Emil...Delmont, So. Dak.
 Munn, Frederick Stanley....
 St. Thomas, Ont., Can.
 Myhre, Barnerd O..Galesville, Wis.
 Nalencz-Koniuszewski, Ladislaus J.
 Chicago
 Neptune, Greg.....Decatur, Ind.
 Nesler, William Mathias....
 Dubuque, Iowa
 Newell, John Cooper..Minden, Nebr.
 *Newman, John Errol.....
 Victoria, B. C., Can.
 Newton, Herbert Rudolph...Chicago
 Nowack, Robert..Menominee, Mich.
 O'Keefe, Charles.....
 Grand Forks, No. Dak.
 Oppegard, Henry A.....
 Sacred Heart, Minn.
 Osborne, Weeden E.....Chicago
 Page, Robert Ray....Allerton, Iowa
 Parlin, Albert.....Chicago
 Pearlman, Louis Henry....
 Lafayette, Ind.
 Pederson, Hans Ferdinand..
 Benson, Minn.
 Penberthy, LaVerne Edward..
 Chicago
 Perrin, Louis I.....Detroit, Mich.
 Perry, Harold Tyner.....
 Fargo, No. Dak.
 Placek, Bohumil.....Chicago
 Price, Joseph E.....LeRoy, Minn.
 Randall, Earl William.....
 Marble Rock, Iowa
 Rank, Leo Francis...Lansing, Minn.
 Reid, Howard Hill.....Barre, Vt.
 Rensvold, Philip Matthew...
 Madison, So. Dak.

*Matriculated but not in attendance

†Did not complete course

- Retter, Henry Helmuth Her-
 manTomah, Wis.
 Richards, Forrest Charles....
 Bridgewater, So. Dak.
 Risetter, Ernest Adolph..Beloit, Wis.
 Roberts, Harold Cecil..LaPorte, Ind.
 Roe, Walter.....Chicago
 Rosenhouse, Aaron J.....
 New York, N. Y.
 Rovelstad, Henry Randolph,
 B.A.Elgin
 Ryan, Francis Sylvester....
 Mount Carmel, Ont., Can.
 Ryan, W. Spencer, M.D....Chicago
 Salmons, Clyde Raymond....
 Winfield, W. Va.
 Sayre, Loren Dana....Boone, Iowa
 Schmitt, Eugene.....Chicago
 Schoonmaker, William Francis
 Arlington, So. Dak.
 Schroeder, Henry John....Palatine
 Schubert, Grover Oscar....Chicago
 Seegmiller, George Andrew..
 Beloit, Wis.
 Serles, Marwin Charles....
 Salem, So. Dak.
 Sharpless, Daun Henry....
 Everett, Wash.
 Shepard, JustinRichmond, Utah
 Sletten, Carl Oliver..Stady, No. Dak.
 †Smith, Geo. D.....Maywood
 Snyder, Louis F.....Mellette, So. Dak.
 Snyder, Raymond Eugene...Chicago
 Stenderson, Gordon, Harry, B.S.
 ...Freeport, Nova Scotia, Can.
- Stevens, Elliott Griffin...Champaign
 Stromberg, Norvin....Hixton, Wis.
 Struik, Henry Peter.....
 Ellsworth, Mich.
 Thorelius, Carl Gustave Paul
 Chicago
 Trevett, Allison Burdette...
 Mason City, Iowa
 Tucker, Garland Lee.....
 South Bend, Ind.
 Underwood, William J.....
 Eau Claire, Wis.
 Van Wye, Gail Howard.....
 Elkhart, Ind.
 Vaughn, Kenneth.....
 North Yakima, Wash.
 Walters, Charles Lee.....
 Anaconda, Mont.
 Warner, Dale.....Rensselaer, Ind.
 Watson, Wilbert S.....
 Vancouver, B. C., Can.
 Webb, Marion Ray..Monroe, Utah.
 Weickardt, Johannes Wilhelm
 Breslau, Germany
 West, Emory Orville.....
 Des Moines, Iowa
 Westfall, Beverly Kemper..Bushnell
 Wickstrom, Walter C.....Chicago
 †Wilson, Erwin Harold.....
 Kingsley, Iowa
 Wunderlich, Frederick Ran-
 dolphGary, Ind.
 Young, Jerry W....Downer's Grove
 Zimmer, Earl Henry.....Chicago

JUNIORS

- Adams, Angus Sanford.....
 Portsmouth, Ohio
 Adsit, Harry Brown.....
 Owatonna, Minn.
 Alexander, Waldo Emerson,
 B.A.Chicago
 Alister, Harris Ashton.....
 LaMoire, No. Dak.
 Allison, Thomas Blythe.....
 Blytheville, Ark.
 Anderson, Ralph M.....Chicago
 Anderson, Reuben Alexander.
 Chicago
 Aronberg, AlbertChicago
 *Baldwin, Lyle A...Portland, Ore.
- Bauman, Arthur John.....
 Council Bluffs, Iowa
 Becker, Arthur Sanford...Tampico
 Behnke, Martin....Reedsburg, Wis.
 Bergh, Harold F.....
 Sioux Falls, So. Dak.
 Berthold, Arthur Hugo Ru-
 dolph....Soran, N. L., Germany
 Bezeau, Frank G.....
 Vancouver, B. C., Can.
 Black, Merle Thomas.....Chicago
 Blakeley, Chester Carmine..
 Tecumseh, Nebr.

*Matriculated but not in attendance
 †Did not complete course

- Blount, Joseph Horace.....
 East Point, Ga.
 Bommersheim, Earle Ferdinand
 Three Oaks, Mich.
 Booth, George Chester, A.B.
 Indianapolis, Ind.
 Borum, Clifford Coe...Barron, Wis.
 Brewer, John Bernard...Norfolk, Va.
 Brodtkorb, Edward A.....
 Edgeley, No. Dak.
 Burns, LeightonOakland
 Burns, William Douglas.....
 Omaha, Nebr.
 *Burri, Otto C...Berne, Switzerland
 Burt, Holmes Clinton...Adams, Mass.
 Butler, Albert J..Sutherland, Iowa
 Campbell, Francis Edwin...Chicago
 Caradine, Harold Benston...
 Monroe, Wis.
 Carleton, Harry Joseph.....
 Sioux Falls, So. Dak.
 Carlos, Thomas Aloysius...Chicago
 Carver, Parley James...Ogden, Utah
 Chapek, Elmer Haenel.....Chicago
 Chesnutt, Edwin Jackson, B.A.
 Cleveland, Ohio
 Clark, Stanley William.....
 Indiana Harbor
 Clements, Raymond Charles...Peoria
 Cohn, Max Arthur.....Chicago
 Connolly, William Warren...
 Liberty Center, Ohio
 Coon, Corliss Dale...Manson, Iowa
 Cowan, Egbert Van Delden...
 Lyons, Iowa
 Crary, Earl Harrison.....
 Grand Forks, No. Dak.
 Danhauer, Stanley A.....
 Evansville, Ind.
 Dauwalter, Juniata...Denton, Nebr.
 Davidson, Walter Joseph....
 Blue Island
 Duffy, John William...Boone, Iowa
 Duhig, John Paul.....Chicago
 Dvorak, Lewis H..Aberdeen, Idaho
 Ebersold, Louis Henry.....Chicago
 Erickson, Carl John...Madison, Wis.
 Erwin, Newton Emmons.....
 Greensburg, Pa.
 *Feuerstein, Fred.....Chicago
 Fey, Laurence Christopher...
 Dallas, Tex.
 Flavin, Charles John...Hammond, Ind.
- Fodor, Julius S.....Chicago
 Foley, Harold Edward.....
 Madison, So. Dak.
 Folsom, Dee Lenzi.....
 Salt Lake City, Utah
 Frazin, Julius.....Chicago
 Frink, Edward Charles.....
 Plaza, No. Dak.
 Fuessle, Alfred Herman....
 Whiting, Ind.
 Fullenwider, Harlan Drue...
 Mechanicsburg
 Goold, LouisChicago
 Gorny, Stephen Stanley, Ph.G.
 Chicago
 Gunter, Alvin Guy.....Chicago
 Gutting, Arthur F..Evanston, Wyo.
 Harlem, Sigurd.Christiania, Norway
 Harris, Leon A.....Chicago
 Henry, Lee, Ph.G.....
 Grand Forks, No. Dak.
 Herries, Henry Arthur....Chicago
 Hoover, B.....Lincoln, Kans.
 Huff, Robert Eugene....Falls, Tex.
 Hughes, Benjamin Wm....Harvey
 Iddings, Maurice Homer....
 Merrillville, Ind.
 *Iio, Kenji.....
 Higashikiz, Osaka, Japan
 Irwin, Vern Driscoll.....
 Two Harbors, Minn.
 Iwamoto, John Haruhisa...
 Tottori, Prefecturi, Japan
 Jacobson, Ferd. Manfred...
 Seattle, Wash.
 Jericho, Smith D.....
 Mt. Pleasant, Iowa
 Johnson, Robert Van Ness,
 B.S.Chicago
 *Johnston, Clem John..Sidney, Ohio
 Joncas, Joseph Severin Ludger
 Winnipeg, Man., Can.
 Kaplan, Herman...Syracuse, N. Y.
 Karr, Ernest Cade.....Seymour
 Katrano, John.....
 Beletsi of Fikkala of Thessaly,
 Greece
 Kean, Albert Conkle.....
 Coleraine, Minn.
 Keck, William L.....Chicago
- *Matriculated but not in attendance
 †Did not complete course

- Kellogg, John S.....Pittsfield
 Kelner, SophieChicago
 Kessler, Laurence, A.B.....Chicago
 Kimmel, Fred Joseph, Ph.G..
 Billings, Mont.
 Kisner, Roy Markley.....Bellair
 Klein, DanielChicago
 Kohen, Michael Mitchell....Chicago
 Kohout, James Joseph.....Chicago
 Kral, Milo George.....Vail, Iowa
 Krueger, AlonzoChicago
 Lieber, MorrisChicago
 Link, Alphonse John.....
 Dyersville, Iowa
 Lovegren, LeRoy Eldon....
 Burlington, Iowa
 Luginbuhl, Albert C.....
 Beaverdam, Ohio
 Lunden, Oskar Samuel....Chicago
 Lustgarten, Henry A.....Chicago
 Lynn, Harold J.....Chicago
 Magoon, Lloyd Vernor.....
 Mason, Mich.
 Maly, Lewis Walter..Lander, Wyo.
 Marks, Rodney Hugh.....Chicago
 Mayer, William Erwin.....
 Cincinnati, Ohio
 McArthur, Earl Donald.....
 Swanson, Sask., Can.
 McCarthy, Thomas Joseph,
 B.A.Chicago
 McClintock, Wesley Heath..Lincoln
 McClurg, William Clare....
 Des Moines, Iowa
 McNamara, Paul Francis...
 Bloomington, Wis.
 Merrifield, Frederick William
 Johannesburg, So. Africa
 Metz, Louis David.....
 Bijou Hills, So. Dak.
 Meyer, Fred Henry.....Gilman
 Miller, IsadoreChicago
 Mitchell, Albion O'Neill, A.B.
 Wilberforce, Ohio
 Moes, Alvin Francis.....Chicago
 Moore, Oliver Chester....
 Dubuque, Iowa
 Motl, Joseph Emil..Waterloo, Wis.
 Murray, William A.....Chicago
 Nalborski, Edwin P.....
 Stevens Point, Wis.
 Newby, Grant Wyman.....
 Sun Prairie, Wis.
- Palmer, Kenneth R...Preston, Minn.
 Parker, Harry Wilfred....Chicago
 Pennigsdorf, Walter.....Chicago
 Peterson, Clarence Herbert. Chicago
 Phillips, David Widmann..Chicago
 Pollock, William A.....Chicago
 Quigley, Howard Joseph....
 Lake Geneva, Wis.
 Ransom, Giles Arlington...
 Burley, Idaho
 Ratner, David Joseph.....Chicago
 Richardson, George Henry..Chicago
 Richter, Ernest Herman....
 Canton, So. Dak.
 Rosenblum, Maurice.....Chicago
 Ross, Richard....Chesley, Ont., Can.
 Rowan, Thomas Francis....Chicago
 Saltzman, Harry.....Chicago
 Sanborn, William Harrison..
 Rockland, Maine
 Scandling, Orville Bennett..
 Iron Mountain, Mich.
 *Schlussel, Noah Webster...
 Detroit, Mich.
 Schmidt, Abrin Gustav, Jr..
 Gresham, Wis.
 Schruth, Joseph Charles.Pepin, Wis.
 Schultz, Charles G.....Chicago
 Seaman, Ralph Barnes.....
 Warner, So. Dak.
 Sears, Victor Hugo.....Chicago
 Seely, Carl David..Huntington, Ind.
 Shapira, Charles Alter....Chicago
 Shesler, John T....Rensselaer, Ind.
 Shipley, Everett Bronson....
 New London, Iowa
 Shipley, James Loraine...Oak Park
 *Smith, Adelbert Nathan....
 Hartford, Mich.
 Smothers, I. Alonzo, B.S...Rossville
 Snowden, Vaughn....Andrews, Ind.
 Snyder, Roy Herbert.....
 Glenboro, Man., Can.
 Sprafka, George Adam.....
 Minto, No. Dak.
 Sprague, Harry Elmer....Chicago
 Soffel, Arthur E.....Maywood
 Stansbury, George.....Chicago
 Steffes, Eugene Q.....
 East Chicago, Ind.
- *Matriculated but not in attendance
 †Did not complete course

Steiner, Allen N.....	Welch, Will Carleton.....
.....Independence, Wis.	.....Solana, New Mex.
Sterrett, Karl Herin.....	Williams, Harry Chadbourne.
Stiles, Austin Campbell.....	.....Augusta, Wis.
.....Rock Port, Mo.	Williams, Mark LeRoy.....
Tarbell, Glee..Watertown, So. Dak.	.....Grand Forks, No. Dak.
Thon, Raymond A.Owatonna, Minn.	Wiman, Lester.....
Trengove, Jesse Samuel.....	.....Oblong
.....Terraville, So. Dak.	Wood, Arthur.....
†Tuchocki, Leo Victor.....	.....Glasford
Urbanowicz, Edmund George	Woods, Clement S.....
.....Chicago	.....Grand Forks, No. Dak.
Valentine, Frank B...Alden, Iowa	Worthy, William Ernest.....
Vander Wolff, Josephine..Elmhurst	.....Newaygo, Mich.
Vorhees, Frank Henry...La Grange	Wysong, Eldwyn A.....
Wach, Charles Edward...Chicago	.....College Corner, Ohio
Wallace, Harold Harlow....	Young, Albert O.....
.....Bancroft, Nebr.	.....Chicago
Weinstock, Emanuel.....	Youngson, George N.....
.....ChicagoMinden, Nebr.
	Zurawski, Arnold E.....
Burlington, Iowa

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Alexander, Edwin Albert...	Butler, Fabius M.....
.....Fresno, Calif.	Chicago
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ChicagoSt. Thomas, Ont., Can.
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Applebaum, Albert.....Salt Lake City, Utah
Chicago	Cart, Jacob Frederick.....
Babcock, George Henry.....Franksville, Wis.
.....Cumberland, Wis.	Chrt, Otto Thomas.....
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.....Waterloo, Wis.	Coe, Harold Wesley.....
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.....Zumbrota, Minn.	Chicago
Benon, Robert Alexander...Chicago	Cole, Alan Victor..Winnipeg, Can.
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.....Carterville	Cooke, John Michael.Norway, Mich.
Biddison, George...Goodland, Kans.	Cooley, Margaret Elizabeth.Chicago
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.....Birmingham, Ala.Galveston, Tex.
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Chicago	Donaldson, Howard Warner.
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.....Milbank, So. Dak.	*Donner, Joe.....
†Brewer, Roscoe Conkling...Chicago
.....Urbana, Ill.	Dufner, Jeffie Hillery.....
Bromund, Roland Charles...Hallettsville, Tex.
.....Duluth, Minn.	
Bronson, Reid Raymond...Evanston	*Matriculated but not in attendance
	†Did not complete course

- Dunsworth, Marcus Meyer...
Lethbridge, Alberta, Can.
 Dybdahl, John Margido....Chicago
 Ellis, Raymond William....
Belvidere, So. Dak.
 English, Winfrey W.....
Warrensburg, Mo.
 *Ericksen, Arthur.....Chicago
 Esslinger, Orin William....
Sheffield, Iowa
 Ezard, Arthur Russell.....
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 Feaman, John Ahroe.....Chicago
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 Ferdinand, Samuel Shepard.Chicago
 †Ferkin, Otis Benjamin.....
Roland, Iowa
 Fischer, Ferdinand George...Joliet
 Fisher, Ralph Warner.....Chicago
 Foley, William Joseph.....Chicago
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 Frech, Charles Albert.....
Huntington, Ind.
 Freudenberg, Robert Scharle.
Chicago
 Friedman, Benjamin T.....Chicago
 *Garretson, Willis B.....Chicago
 Garvey, Allen William.....
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 Gee, J. Ewart.....
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 Gillmeister, Joseph Francis.Chicago
 Given, George William.....
Lake Mills, Wis.
 Goldfuss, Gail Irving.....Chicago
 Gollin, Isadore.....Chicago
 Graven, Leif F...Menomonie, Wis.
 Guinon, Clarence Mathew...
Grand Rapids, Mich.
 Gunnarson, Chester Alvin...
Hallowell, Minn.
 Gurney, Edward Brower.....Joliet
 *Hagg, Anna Lisa.....
Uleaborg, Finland
 *Halperin, JacobChicago
 Halterman, Ike L..Mt. Vernon, Mo.
 Hamilton, James W.....
Langdon, No. Dak.
 *Hardesty, Albert Vergil...Homer
 Hardy, T. Fred.Salt Lake City, Utah
- *Harris, Abram W., Jr., A.B.
Evanston
 Hefter, Roy.....Chicago
 Hemans, Charles Edward....
Eau Claire, Wis.
 *Hennes, Jacob Henry.....Chicago
 Henry, William John, B.A.
Oak Hill, Ala.
 Hielscher, Paul Amandus....
South Minneapolis, Minn.
 Highland, Arthur Chester...
Langford, So. Dak.
 Hirn, Edward M..Escanaba, Mich.
 Ho, Sue Kong...Honolulu, Hawaii
 Hoffman, Harold Middaugh..
Elkhorn, Wis.
 Holland, Theodore Albert...Chicago
 Holm, Harold Andrew.....Chicago
 Hooper, Harold Andrew....
Iron Mountain, Mich.
 Hornbeck, Ralph Abram....
Superior, Wis.
 Hoskin, Dale Gelling.Darling, Wis.
 Howell, Harry Carl...Green Valley
 Huntley, Herbert LeRoy.....
Lead, So. Dak.
 Hurton, Roderick George H..
Carman, Manitoba, Can.
 Huxtable, Harvey Simpson..
Mineral Point, Wis.
 Jacobson, Irvin LeRoy.....
Rushmore, Minn.
 Johnson, Gustaf William...
Norway, Mich.
 Jonas, Samuel T.....Chicago
 Jones, Benjamin Roswell...
Wilmington
 Jones, William Walter...Bradford
 Joyce, Cyril Montague.....
Stewartville, Minn.
 Joyce, Delmer Richard.....
Grand Meadow, Minn.
 Kabiller, Sol.....Chicago
 Kakac, Ione Jeannette..Cresco, Iowa
 Kirby, Henry Wolcott, B.A.
Jacksonville
 Kiser, Richard Ralph.....
Huntington, Ind.
 Koppel, Samuel Martin....Chicago

*Matriculated but not in attendance
 †Did not complete course

- Kraschovetz, Joseph.....
Frinyfalva, Hungary
 Kroschel, John Anthony F....
Hallettsville, Tex.
 Lager, Hugo Oscar.....Chicago
 Lambert, Morton Nathaniel..Chicago
 Landry, Howard Peter..Thorp, Wis.
 Lawrence, Otto Herbert.....
Canton, So. Dak.
 Layng, Richard Holmes.....
Athens, Ontario, Can.
 Lebowitz, Abe Emanuel.....
South Chicago
 Lockwood, Hillyard Hanna..
Westport, Ontario, Can.
 Loux, Robert Walter.....
Taconite, Minn.
 Lovejoy, Arnold..Union City, Mich.
 Lovitt, Willis Huston....LaHarpe
 Lundquist, Gottfred Rudolph.
Chicago
 Lysakowska, Wanda Florence
Chicago
 Magnuson, Homer Norman..
Stillwater, Minn.
 Maricle, Jay.....Wells, Minn.
 Matteson, Clarence Edwin....
Burley, Idaho
 May, Lewis Renwick.....Savanna
 *Mayland, Arnold Monroe...
Austin, Minn.
 McClain, Harris W., Ph.G...
Chicago
 McGilligan, Stanley P.....Findlay
 McLaughlin, Angus James....
Blue Earth, Minn.
 McLaughlin, Hugh Charles...
Sanger, Cal.
 McLean, Murray Hector.....
Winnipeg, Manitoba, Canada
 Meyers, Ernest Eugene.....
Davenport, Iowa
 Meyers, Irwin Albert.....
Milwaukee, Wis.
 Miller, Charles.....Chicago
 Miller, Clyde Jay.....Mattoon
 Miller, Walter Lee.....Aurora
 *Minter, Charles Toy, Jr...Chicago
 †Moore, Clinton Russell, B.A.
Nashville, Tenn.
 Morton, Ira Irving...Memphis, Mo.
 Newton, Francis Jefferson..Chicago
 Olafsson, Paul...Reykjavik, Iceland
 Oppice, Harold Whinery....
Marshalltown, Iowa
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 Parks, Ruth Harriett.....Moline
 Pearlman, Abram James....Chicago
 Pierce, Ray Garfield..Buffalo, N. Y.
 Pitts, Leonard Brooks.....Decatur
 Pomerance, Isaac S.....Chicago
 Powell, Farrow Raymond, B.A.
Mishawaka, Ind.
 Proctor, Clarence Eugene..Springton
 Pursell, Murat Gillespie....Chicago
 *Pyes, Sheperd
Grand Forks, No. Dak.
 *Quadow, AlbertChicago
 Rasmus, Richard Nathaniel..
Farmington, Iowa
 Reichman, Preston..Wabasha, Minn.
 Reilley, Raymond Aloysius..Chicago
 Reilly, William.....Lead, So. Dak.
 Rhobotham, Frank Blaine..Chicago
 *Riordan, Albert Howe.....
Correctionville, Iowa
 Rohner, Joseph John..Carroll, Iowa
 Rollo, Earl Eugene....Murphysboro
 Rose, Peter Joseph..Minto, No. Dak.
 Rosenstengel, Bernard Leo...
 .Toowoomba, Q'Land, Australia
 Rundell, Edgar Oliver..Rewey, Wis.
 Sanderson, Arthur George....
Sydney, N. S. W., Australia
 Schultz, Louis Charles.....
Columbus, Wis.
 Scofield, Perry Lee..Huron, So. Dak.
 Senick, Robert Felix William.
Chicago
 Serviss, Chester Arthur.....
Lindsay, Mont.
 Shaw, Charles Andrew.....
Ironwood, Mich.
 Shidler, Mark Heber.....
Huntington, Ind.
 *Shimon, Albert J.....
Pocahontas, Iowa
 Shimomura, Zenzo.....
Kuse, Okayamaken, Japan
 Shook, Claude Burdette.....
Preston, Minn.
 Shriver, Presley....Seymour, Iowa
 Smith, Elden Jerome...Taylor, Wis.
 *Matriculated but not in attendance
 †Did not complete course

- Sorbel, Alfred R..Webster, So. Dak.
 Stein, Abraham.....Chicago
 Stephen, Elmer Joseph.....Joliet
 Sternberg, Morris B.....Chicago
 Sundquist, George N.....Chicago
 *Sweeney, Raymond Joseph...
 Kelso, Wash.
 Sweet, Erwin Earl..Bay City, Mich.
 Szafranski, Leonard Bernard.
 Chicago
 Talbot, Joseph David.....Joliet
 Thomas, Anthony Ignatius...
 North Collins, N. Y.
 Thornton, Reed Franklin....
 Lawton, Mich.
 Thorsness, Arlo..Cumberland, Wis.
 †Tindall, Ross Brooks..Omaha, Neb.
 Toraason, Clifford Melphor..
 Blair, Wis.
 Trulson, Palmer Charles..Princeton
 Vitak, Louis Augustus.....Chicago
 *Wagner, John William.Jerseyville
 Wagner, William M.....Princeton
 Wall, Otis John..Wabasha, Minn.
 Warner, John Thurman.....
 Dayton, Iowa
 Watts, Emmett R.What Cheer, Iowa
 Weeks, Lester Dale, A.B.....
 Indianola, Iowa
 Wenger, Herman Rudolph..Chicago
 Werner, Adrian Frank.....
 Blue Earth, Minn.
 Westfall, Claude LaForest..Savanna
 Westfall, Mary H.....Bushnell
 White, Evert Leon.....
 Hamiota, Manitoba, Canada
 Wiggins, Sidney Albert.....Milan
 *Wilcox, Curtis M.Dodgeville, Wis.
 Williams, Ervin Rosswell..Chicago
 Williams, Hubbard Sidney...
 Columbia, Mo.
 Willis, Arthur W.....Chicago
 Wilson, Daniel William.....
 Belle Plaine, Minn.
 Wind, Joseph B.....Chicago
 *Witous, Charles John....Chicago
 Wood, Guy L.....Milbank, So. Dak.
 Wright, James Stanley.....
 San Antonio, Tex.
 Wroblewski, Edward Jean...
 Cincinnati, Ohio
 Yeager, Clarence Henry...
 Wauseon, Ohio
 Yeager, Robert Bloomfield...
 Wauseon, Ohio
 Zimmerman, Edward Allen.Chicago
 *Matriculated but not in attendance
 †Did not complete course

SPECIAL STUDENTS IN ANATOMY

- Austin, William Henry....Canada
 Barber, George Franklin, Jr..
 Tennessee
 Beal, Joseph.....Michigan
 Brooks, Frank Reuben.....Ohio
 Burford, Reed Oscar....Minnesota
 Calkins, Miles N.....Illinois
 Clark, Leon B.....Colorado
 Frantz, William Earl.....Kansas
 Green, Charles Joseph.....Ohio
 Gunn, Walter Hazlett.....Illinois
 Hoxsey, Lowell.....Nebraska
 Ironside, John Oscar.....Canada
 Knapp, Ralph Newell.....Missouri
 Lagerlof, George.....Illinois
 Martin, Anselmo Joseph.....
 Pennsylvania
 Mestrezat, Jean Paul...W. Virginia
 Miller, Harry A.....Illinois
 Miller, Nelson Thomas.....Ohio
 Morin, George Leslie.....Colorado
 Mumm, Frank H.....Wisconsin
 Nye, Harry F.....Ohio
 Passmore, Austin.....Illinois
 Plank, Clyde H.....Kansas
 Primrose, David Clair...Nebraska
 Quant, Roy E.....Illinois
 Selby, George G.....Ohio
 Sellon, Raymond Newton....Iowa
 Springer, Harry J.....Illinois
 Stoddard, Alonzo Edwin..Minnesota
 Summers, Willis Hastings..Illinois
 Tanguis, Vesta A.....Louisiana
 Terrill, Lawrence.....Colorado
 Umbrecht, Raymond Grant..Illinois
 Vander Voort, Paul C....Michigan
 Webster, Charles Ernest...Illinois
 Wertheim, Edgar.....Illinois
 Weston, Norman James...Australia
 Wright, Everett Hartrum....Ohio
 Zimmerman, Adelbert J...Louisiana

SPECIAL STUDENTS IN DENTISTRY

Ballenger, William D., D.D.S.	Fetrow, Samuel W., D.D.S.	Indiana
.....Georgia	Grimnes, Helga	Norway
Bostrom, Annie Margareta..Sweden	Howden, David S.	Canada

PRACTITIONERS' CLASS, 1915

Bulyea, Harry Ernest, D.M.D.	Canada
Byington, Chilton Edward, R.D.	Tennessee
Cornish, Marshall Sanford, D.D.S.	Minnesota
Cranz, Lester Bernhard, D.D.S., Ph. D.	California
Finnigan, Frederick James, D.D.S.	Kansas
Garner, Frank Baldwin, D.D.S.	Indiana
Gruenfeld, Julius, R.D.	Iowa
Hill, David Bennett, D.D.S.	Oregon
Holloway, Cicero Julius, D.D.S.	Oklahoma
Jensen, James, D.D.S.	Iowa
Marks, Leon Heilbron, D.D.S.	California
Marven, George Harrison, D.D.S.	Massachusetts
Moeller, William K., R.D.	No. Dakota
Morgan, Edwin A., D.D.S.	Missouri
Plaster, Henry Hannibal, D.D.S.	Texas
Rice, Willis Guard, D.D.S.	Indiana
Rowley, Lloyd Evremonde, D.D.S.	Kansas
Soileau, Bussy A., D.D.S.	Louisiana
Thiessen, Louise, D.D.S.	Kansas
Wick, William Frederic, D.D.S.	Wisconsin
Wright, Robert Nicholas, D.S.	Manila, P. I.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

	Seniors	Juniors	Freshmen	Specials	Post-Grad.	Total
Alabama	..	..	2	..	..	2
Arkansas	I	I	..	..	..	2
Australia	2	..	2	I	..	5
California	..	..	2	..	2	4
Canada	7	4	II	3	I	26
Colorado	..	..	I	3	..	4
Cuba	..	..	I	..	..	I
England	I	..	..	..	..	I
Georgia	..	I	..	I	..	2
Germany	I	I	I	..	..	3
Greece	..	2	..	..	..	2
Hawaiian Islands	I	..	I	..	..	2
Hungary	..	..	I	..	..	I
Iceland	..	..	I	..	..	I
Idaho	..	2	I	..	..	3
Illinois	52	74	92	II	..	229
Indiana	9	10	4	I	2	26
Iowa	14	15	14	I	2	46
Japan	I	2	I	..	..	4

	Seniors	Juniors	Freshmen	Specials	Post-Grad.	Total
Kansas	1	1	1	2	3	8
Louisiana .....	..	..	..	2	1	3
Maine .....	..	1	..	..	..	1
Massachusetts .....	..	1	..	..	1	2
Michigan	5	6	12	2	..	25
Minnesota	15	5	18	2	1	41
Mississippi	1	..	1	..	..	2
Missouri	1	1	4	1	1	8
Montana	1	1	1	..	..	3
Nebraska	3	6	3	2	..	14
New Mexico .....	..	1	..	..	..	1
New York	1	1	2	..	..	4
North Dakota	7	8	3	..	1	19
Norway	1	1	..	1	..	3
Ohio	3	8	3	6	..	20
Oklahoma	1	..	..	..	1	2
Oregon	1	1	..	..	1	3
Pennsylvania .....	..	1	..	1	..	2
Philippine Islands .....	..	..	..	..	1	1
South Africa .....	..	1	..	..	..	1
South Dakota	13	8	9	..	..	30
Sweden	2	..	..	1	..	3
Tennessee .....	..	..	1	1	1	3
Texas	3	2	4	..	1	10
Utah	2	2	2	..	..	6
Vermont	1	..	..	..	..	1
Virginia	1	1	..	..	..	2
Washington	5	1	1	..	..	7
West Indies	1	..	..	..	..	1
West Virginia	1	..	..	1	..	2
Wisconsin	18	13	19	1	1	52
Wyoming	1	2	..	..	..	3
Total	178	185	219	44	21	647
The number of women included in this table.....	4	3	7	2	1	17

Northwestern University Dental School Alumni Association

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M. M. PRINTZ, *Secretary and Treasurer*, 4235 Lake Park Ave.,
Chicago

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T. B. S. WALLACE, Chicago.
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The annual clinics will be held Tuesday, June 13, 1916, at the University Building.

Through the medium of the Journal we have aroused a keener interest among the members of our Association.

All are requested to send in material of interest. The Journal will serve as a medium for the exchange of friendly greetings. A new interest will thus be aroused, and still better work done and more accomplished by our Association in the future.

All members of the Association in good standing will receive the Journal. The payment of their dues, annually, fifty cents, secures the Journal without additional cost.

Any graduate of the Northwestern University Dental School may become a member of the Alumni Association upon payment of the membership fee of one dollar and fifty cents annually.

We ask that the Alumni will support this undertaking even stronger than in the past, and coöperate earnestly with the officers of the Association and the Journal staff in making our official publication a still greater success.

For any information regarding the Association, address the secretary,

M. M. PRINTZ, *Secretary-Treasurer*,
4235 Lake Park Ave., Chicago.

For information regarding the *School*, write DR. C. R. E. KOCH,
31 W. Lake St., Chicago.

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